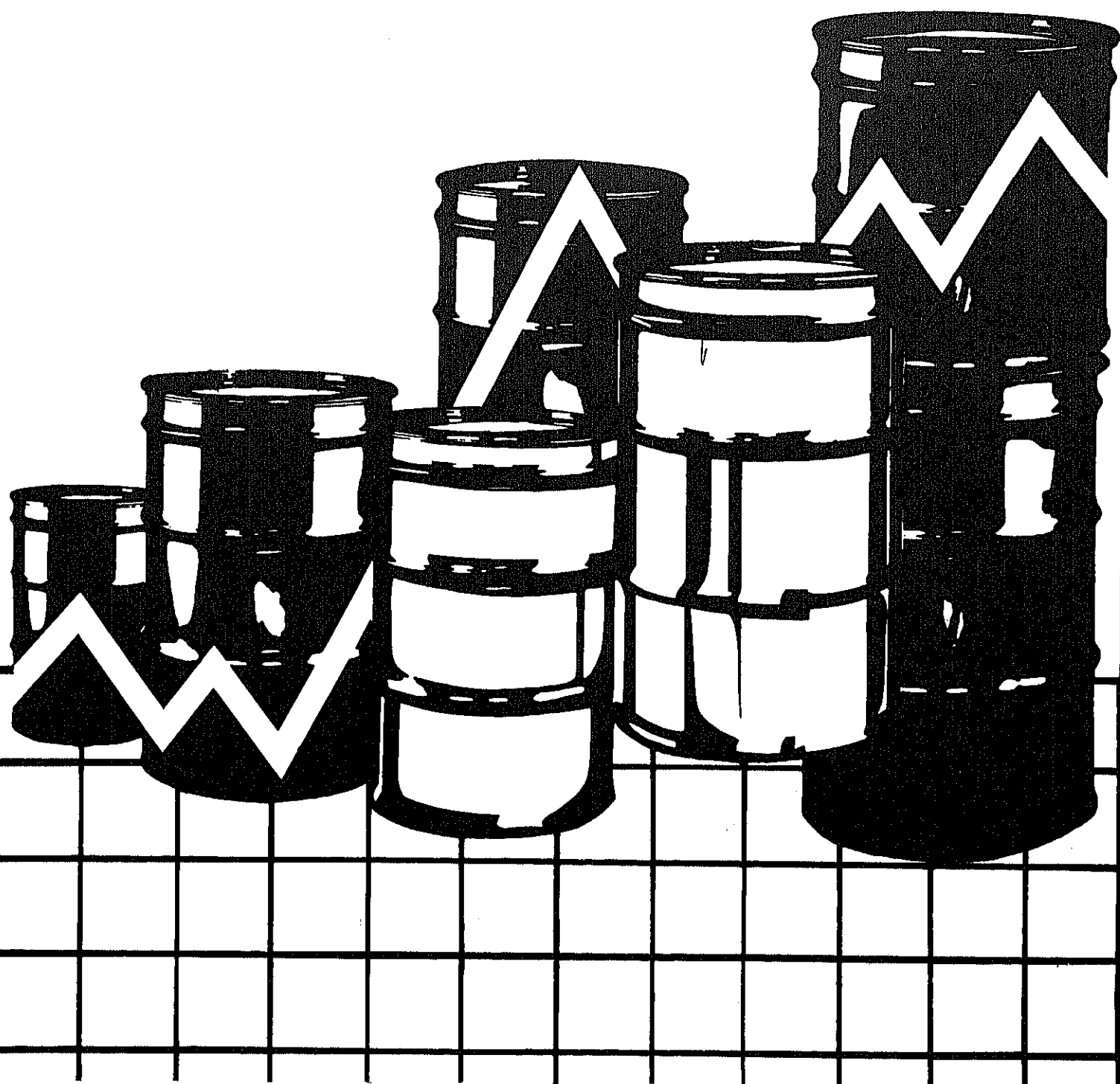


# Weekly Petroleum Status Report



Data for Week Ended:  
January 3, 1986



The Weekly Petroleum Status Report (WPSR) provides timely information on the petroleum supply situation in the context of historical information, selected prices, and forecasts. The WPSR is intended to provide up-to-date information to the industry, the press, planners, policymakers, consumers, analysts, and State and local governments. It is published each Thursday by the Energy Information Administration (EIA). The data contained in this report are based on company submissions for the week ending 7 a.m. the preceding Friday.

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Questions on energy statistics should be addressed to the NEIC. Addresses and telephone numbers appear below.

National Energy Information Center, EI-20  
Energy Information Administration  
Forrestal Building  
Room 1F-048  
Washington, D.C. 20585  
(202) 252-8800

Superintendent of Documents  
U.S. Government Printing Office  
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(202) 783-3238

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This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should not be construed as advocating or necessarily reflecting any policy position of the Department of Energy or any other organization.

## HIGHLIGHTS

### Refinery Activity

Crude oil input to refineries averaged 12.5 million barrels per day for the four weeks ending January 3, 1986. Refinery capacity utilization averaged 80.1 percent during the period. During the four weeks ending January 3, 1986, motor gasoline production averaged 6.7 million barrels per day and distillate fuel oil production averaged 3.1 million barrels per day.

### Stocks

On January 3, 1986, stocks of crude oil (excluding the Strategic Petroleum Reserve) stood at 326.9 million barrels, about 5 percent below the level one year ago. Stocks of total motor gasoline, at 226.4 million barrels, were about 7 percent below the level one year ago. Distillate fuel oil stocks stood at 145.1 million barrels, about 9 percent below the level one year ago. Stocks of residual fuel oil stood at 49.7 million barrels, about 5 percent below the level one year ago.

### Imports

Net imports of crude oil (including imports for the Strategic Petroleum Reserve) and petroleum products together averaged 4.7 million barrels per day for the four weeks ending January 3, 1986, about 21 percent above the average a year ago. Gross imports of crude oil (excluding the Strategic Petroleum Reserve) averaged 3.5 million barrels per day for the four-week period ending January 3, 1986.

### Products Supplied

Total petroleum products supplied averaged 16.5 million barrels per day for the four-week period ending January 3, 1986, which is about 7 percent above the rate supplied a year ago. Motor gasoline was supplied at a rate of 6.7 million barrels per day, which is about 3 percent above the rate supplied a year ago. Distillate fuel oil was supplied at a rate of 3.3 million barrels per day, about 12 percent above the rate supplied a year ago.

### World Crude Oil Price

- o The spot price for United Kingdom Brent Blend 38° increased 40 cents to \$26.00 a barrel for the week ending January 3, 1986.

As a result of this price increase, the weighted average international price of crude oil as of January 7, 1986 increased 4 cents to \$27.10 a barrel.

**Note:** The listing of representative world crude oil prices on page 18 has been updated effective January 1, 1986, to account for changes in crude oil trade patterns. Prices for the following two crude oils have been moved to the published list.  
Norway -- Ekofisk Blend 42°  
China -- Daqing 33°

The methodology used to calculate the weighted average international price of crude oil remains the same as that described in Appendix D. Estimates of the weighted average international price of oil for periods prior to January 1, 1986, were not recalculated.

### Spot Market Product Prices

For the week ending January 3, 1986, compared to last available data for the week ending December 20, 1985, the average spot market price of 98 octane gasoline on the Rotterdam market remained unchanged at \$30.07 a barrel; the gasoline price increased 27 cents to \$32.57 a barrel, and the price of residual fuel oil increased 60 cents to \$22.22 a barrel.

On the New York market, the average spot price of 89 octane regular leaded gasoline increased 40 cents to \$29.19 a barrel; the price of No. 2 heating oil decreased \$1.47 to \$32.44 a barrel, and the price of residual fuel oil increased 25 cents to \$24.50 a barrel.

\*\*\*\*\*  
\*  
\* Survey forms used to collect data for the Weekly Petroleum Status Report (WPSR) have been revised to include additional information on motor gasoline. The revised forms were first used to collect data for the week ending January 3, 1986. Data on production, stocks, imports, and product supplied for finished motor gasoline and finished unleaded motor gasoline are now presented in the WPSR. In addition, data on motor gasoline blending components, previously included in imports of "Other Petroleum Product," are reported separately. Because data for only one week are available for some of these data series, averages could not be calculated. These data series will now show NA (for not available) until more weeks become available.  
\*

\*\*\*\*\*



## U.S. PETROLEUM BALANCE SHEET

Petroleum Supply (Thousand Barrels per Day)	Four Week Averages For Period Ending		Percent Change	Cumulative Daily Averages 2 Days		Percent Change
	01/03/86	01/03/85		1986	1985	
<b>Crude Oil Supply</b>						
(1) Domestic Production <sup>1</sup>	E8,931	8,899	0.4			
(2) Net Imports (Including SPR) <sup>2</sup>	3,404	2,923	16.5			
(3) Gross Imports (Excluding SPR)	3,475	2,876	20.8			
(4) SPR Imports	69	229	--			
(5) Exports	E139	182	-23.5			
(6) SPR Stocks Withdrawn (+) or Added (-)	-53	-239	--			
(7) Other Stocks Withdrawn (+) or Added (-)	-169	-25	--			
(8) Products Supplied and Losses	E-56	-65	--			
(9) Unaccounted-for Crude	433	241	--			
(10) Crude Oil Input to Refineries	12,491	11,734	6.5			
<b>Other Supply</b>						
(11) NGL Production	E1,600	1,648	-3.0			
(12) Other Hydrocarbon Input and Alcohol Input	E61	33	87.6			
(13) Crude Oil Product Supplied	E55	64	-14.5			
(14) Processing Gain	593	577	2.8			
(15) Net Product Imports <sup>3</sup>	1,337	997	34.0			
(16) Gross Product Imports <sup>3</sup>	1,916	1,787	7.2			
(17) Product Exports	E580	790	-26.6			
(18) Product Stocks Withdrawn (+) or Added (-) <sup>4</sup>	383	376	--			
(19) Total Product Supplied for Domestic Use	16,520	15,430	7.1			
<b>Products Supplied</b>						
(20) Motor Gasoline	6,714	6,539	2.7			
(21) Naphtha-type Jet Fuel	199	193	3.2			
(22) Kerosene-type Jet Fuel	1,233	1,047	17.8			
(23) Distillate Fuel Oil	3,251	2,908	11.8			
(24) Residual Fuel Oil	1,403	1,210	16.0			
(25) Other Oils Supplied <sup>5</sup>	3,717	3,533	5.2			
(26) Total Products Supplied	16,520	15,430	7.1			
<b>Petroleum Stocks</b> (Million Barrels)	01/03/86	12/27/85	01/03/85	Percent Change from Previous Week Year Ago		
Crude Oil (Excluding SPR) <sup>6</sup>	326.9	320.3	344.8	2.0	-5.2	
Total Motor Gasoline	226.4	222.0	242.7	2.0	-6.7	
Finished Leaded Gasoline	81.1	78.3	92.1	3.5	-11.9	
Finished Unleaded Gasoline	110.3	109.3	112.7	0.9	-2.1	
Blending Components	35.0	34.3	38.0	2.1	-7.8	
Naphtha-type Jet Fuel	6.0	6.6	6.8	-9.2	-11.8	
Kerosene-type Jet Fuel	34.0	36.3	35.1	-6.5	-3.2	
Distillate Fuel Oil	145.1	143.3	159.8	1.2	-9.2	
Residual Fuel Oil	49.7	50.5	52.6	-1.4	-5.4	
Unfinished Oils	103.3	105.4	94.0	-2.0	10.0	
Other Oils	E142.3	E144.6	166.5	-1.5	-14.5	
Total Stocks (Excluding SPR)	1,033.8	1,029.0	1,102.3	0.5	-6.2	
Crude Oil in SPR	493.3	492.7	451.0	0.1	9.4	
Total Stocks (Including SPR)	1,527.1	1,521.7	1,553.2	0.4	-1.7	

E=Estimate based on monthly data.

1 Includes lease condensate.

2 Net Imports = Gross Imports (line 3) + SPR Imports (line 4) - Exports (line 5).

3 Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

4 Includes an estimate of minor product stock change based on monthly data.

5 Includes crude oil product supplied, natural gas liquids, liquefied refinery gases, other liquids, and all finished petroleum products except motor gasoline, jet fuels, and distillate and residual fuel oils.

6 Includes crude oil in transit to refineries.

7 Included are stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils. For the current two weeks, stocks of these minor products are estimated from monthly data. (See Glossary: Stock Change (Refined Products)).

Note: Due to independent rounding, individual product detail may not add to total. The percentages shown are calculated using unrounded numbers.

Source: o 1984 Monthly Data: EIA, "Petroleum Supply Annual."

o 1985 Monthly Data: EIA, "Petroleum Supply Monthly."

o 1985-1986 Four-Week Averages: Estimates based on EIA weekly data.

Weekly Petroleum Status Report/Energy Information Administration

REFINERY ACTIVITY  
(Million Barrels per Day)

Inputs and Utilization

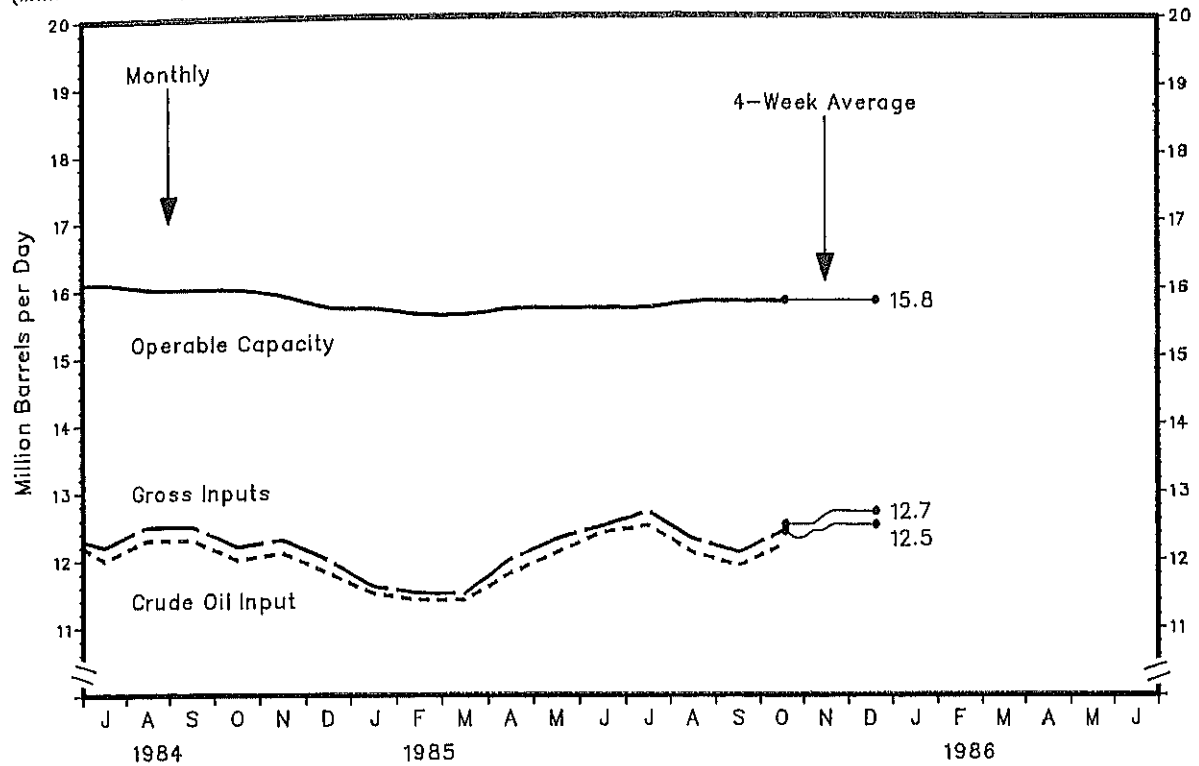
Year/Element	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1983												
Crude Oil Input	11.1	10.6	10.9	11.4	11.8	12.3	12.4	12.2	12.5	11.8	12.0	11.2
Gross Inputs	11.5	11.0	11.1	11.7	12.1	12.6	12.6	12.4	12.7	12.0	12.2	11.4
Operable Capacity	16.9	16.9	16.9	16.9	16.9	16.8	16.8	16.7	16.3	16.3	16.3	16.3
Percentage Utilization <sup>1</sup>	68.0	65.1	66.0	69.6	71.6	74.9	74.9	73.8	78.1	73.4	74.8	69.9
1984												
Crude Oil Input	11.6	12.2	11.9	11.9	12.2	12.3	12.0	12.3	12.3	12.0	12.1	11.8
Gross Inputs	11.8	12.3	12.1	12.1	12.4	12.4	12.2	12.5	12.5	12.2	12.3	12.0
Operable Capacity	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.0	16.0	16.0	15.9	15.7
Percentage Utilization <sup>1</sup>	72.9	76.0	74.9	74.9	77.4	77.3	75.7	78.2	78.0	75.9	77.2	76.0
1985												
Crude Oil Input	11.5	11.4	11.4	11.8	12.1	12.4	12.5	12.1	11.9	12.2		
Gross Inputs	11.6	11.5	11.5	12.0	12.3	12.5	12.7	12.3	12.1	12.4		
Operable Capacity	15.7	15.6	15.6	15.7	15.7	15.7	15.7	15.8	15.8	15.8		
Percentage Utilization <sup>1</sup>	75.2	73.7	73.6	76.3	78.3	79.3	80.8	77.8	76.6	78.2		
Average for Four-Week Period Ending:												
1985-1986	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
Crude Oil Input	12.4	12.3	12.3	12.4	12.4	12.5	12.5	12.5	12.5	12.5		
Gross Inputs	12.5	12.5	12.5	12.5	12.6	12.7	12.7	12.7	12.7	12.7		
Operable Capacity	E15.8	E15.8	E15.8	E15.8	E15.8	E15.8	E15.8	E15.8	E15.8	E15.8		
Percentage Utilization <sup>1</sup>	79.4	79.2	79.2	79.4	79.7	80.7	80.6	80.3	80.5	80.1		

Production by Product

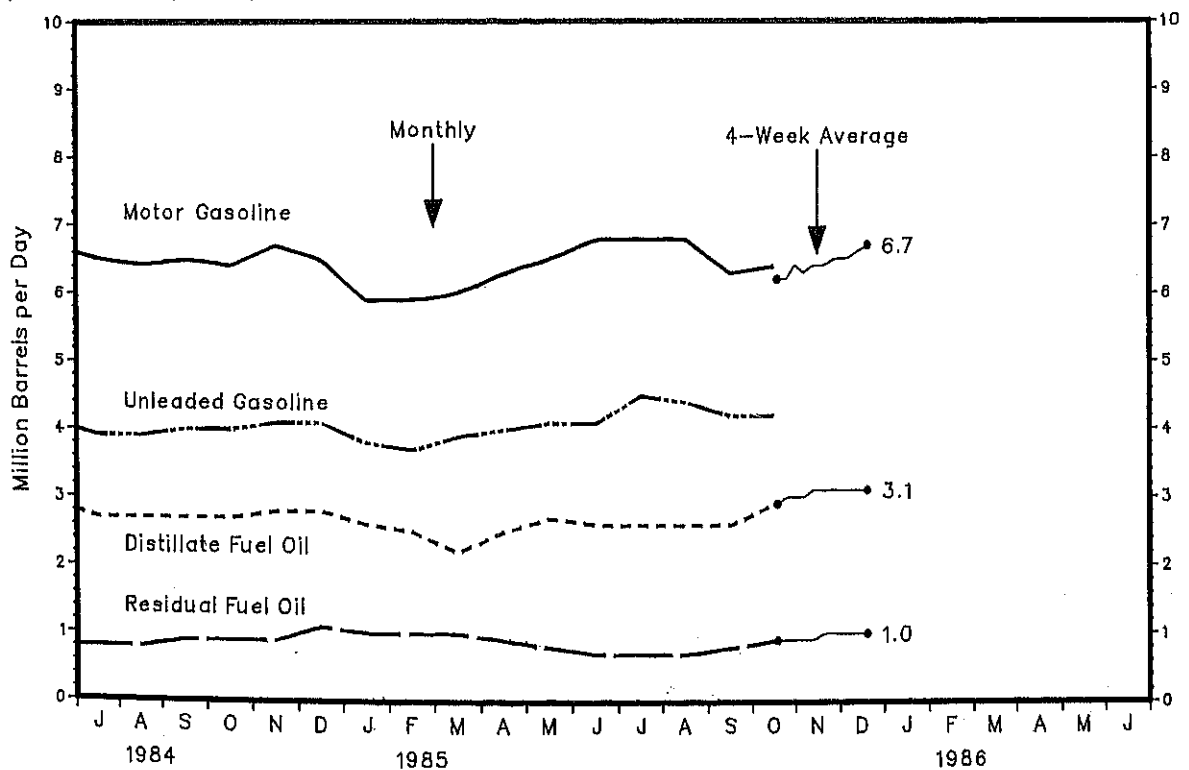
Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1983												
Finished Motor Gasoline	6.1	5.8	5.9	6.2	6.4	6.7	6.7	6.5	6.6	6.2	6.6	6.3
Leaded	2.7	2.6	2.7	2.8	2.9	3.1	3.0	2.9	2.9	2.7	2.9	2.7
Unleaded	3.3	3.2	3.2	3.4	3.5	3.5	3.7	3.6	3.8	3.5	3.8	3.6
Jet Fuel	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.1	0.9
Distillate Fuel Oil	2.3	2.1	2.0	2.2	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.5
Residual Fuel Oil	1.0	0.9	0.8	0.9	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.9
1984												
Finished Motor Gasoline	6.0	6.3	6.4	6.5	6.7	6.6	6.5	6.4	6.5	6.4	6.7	6.5
Leaded	2.5	2.6	2.6	2.7	2.7	2.7	2.6	2.5	2.5	2.4	2.6	2.4
Unleaded	3.5	3.7	3.7	3.8	3.9	4.0	3.9	3.9	4.0	4.0	4.1	4.1
Jet Fuel	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1
Distillate Fuel Oil	2.6	2.9	2.5	2.3	2.6	2.9	2.7	2.7	2.7	2.7	2.8	2.8
Residual Fuel Oil	1.0	1.0	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.1
1985												
Finished Motor Gasoline	5.9	5.9	6.0	6.3	6.5	6.8	6.8	6.8	6.3	6.4		
Leaded	2.1	2.2	2.2	2.3	2.4	2.6	2.2	2.4	2.1	2.1		
Unleaded	3.8	3.7	3.9	4.0	4.1	4.1	4.5	4.4	4.2	4.2		
Jet Fuel	1.1	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2		
Distillate Fuel Oil	2.6	2.5	2.2	2.5	2.7	2.6	2.6	2.6	2.6	2.9		
Residual Fuel Oil	1.0	1.0	1.0	0.9	0.8	0.7	0.7	0.7	0.8	0.9		
Average for Four-Week Period Ending:												
1985-1986	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		

## Refinery Activity

Inputs and Utilization  
(Million Barrels per Day)



Production by Product  
(Million Barrels per Day)



Source: See Sources Section of this publication.

Week Ending 01/03/86 Weekly Petroleum Status Report/Energy Information Administration

STOCKS OF CRUDE OIL AND PETROLEUM PRODUCTS<sup>1</sup>, U.S. TOTALS  
(Million Barrels)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1983</b>												
Crude Oil <sup>2</sup>	359.8	363.3	355.0	361.2	352.5	350.5	335.1	348.7	346.7	348.9	341.4	343.9
Motor Gasoline	249.7	250.2	223.0	220.7	223.1	222.6	230.5	226.3	229.1	227.4	235.8	222.4
Finished Leaded	105.6	104.0	90.8	90.9	93.4	95.1	97.9	95.4	94.6	93.7	96.4	94.1
Finished Unleaded	101.5	102.5	91.9	91.9	91.9	87.7	91.9	89.4	94.7	93.4	99.6	91.4
Blending Components	42.5	43.8	40.4	37.9	37.8	39.7	40.7	41.5	39.8	40.3	39.8	36.9
Jet Fuel	40.7	39.4	41.6	40.3	41.1	41.1	40.8	40.0	41.4	43.2	45.6	38.6
Distillate Fuel Oil	167.6	148.2	118.1	103.1	108.9	113.7	130.7	142.4	154.0	162.6	161.2	140.3
Residual Fuel Oil	60.5	53.3	46.3	46.6	51.0	49.9	51.9	48.3	49.7	51.2	54.2	48.5
Unfinished <sub>3</sub> Oils	110.6	108.7	111.8	114.6	113.1	110.8	108.0	110.6	112.9	112.2	109.1	108.0
Other Oils <sup>3</sup>	162.9	161.0	163.9	170.2	176.9	184.4	188.8	191.5	190.6	194.9	190.9	172.9
Total (Excl. SPR)	1,151.9	1,124.1	1,059.7	1,056.6	1,066.7	1,073.0	1,085.8	1,107.7	1,124.3	1,140.3	1,138.3	1,074.5
Crude Oil in SPR	300.6	306.1	311.8	317.7	326.8	332.5	340.7	351.8	361.0	367.2	371.3	379.1
Total (Incl. SPR)	1,452.5	1,430.3	1,371.6	1,374.4	1,393.5	1,405.5	1,426.4	1,459.5	1,485.3	1,507.5	1,509.6	1,453.6
<b>1984</b>												
Crude Oil <sup>2</sup>	348.7	340.2	336.4	345.6	359.0	352.9	347.9	334.6	325.2	343.0	343.8	345.4
Motor Gasoline	225.7	237.1	242.6	248.0	252.6	245.5	238.1	224.4	234.1	232.4	240.1	243.3
Finished Leaded	92.3	96.5	97.7	100.8	101.0	96.7	91.8	85.4	87.5	84.0	88.4	92.3
Finished Unleaded	93.3	100.2	104.4	106.4	109.4	107.5	107.9	100.5	106.6	109.0	110.1	112.9
Blending Components	40.1	40.5	40.5	40.8	42.2	41.4	38.4	38.5	40.0	39.4	41.6	38.1
Jet Fuel	35.6	39.1	40.7	40.8	41.1	43.0	43.6	45.6	45.0	44.7	44.9	42.0
Distillate Fuel Oil	119.3	132.2	109.6	97.7	98.1	112.8	124.4	133.3	142.9	152.2	161.0	161.1
Residual Fuel Oil	45.1	57.1	47.9	47.4	46.4	46.9	49.2	44.6	46.8	50.8	47.0	53.0
Unfinished <sub>3</sub> Oils	110.7	109.7	115.7	120.3	122.3	110.8	106.0	106.0	108.4	111.1	105.4	93.5
Other Oils <sup>3</sup>	159.7	160.7	159.7	165.1	172.1	176.9	179.8	179.6	179.2	172.8	171.0	167.5
Total (Excl. SPR)	1,044.8	1,076.1	1,052.5	1,064.9	1,091.7	1,088.8	1,089.2	1,068.0	1,081.7	1,107.1	1,113.3	1,105.7
Crude Oil in SPR	384.4	387.2	391.8	396.9	404.5	413.7	423.9	429.5	431.1	436.8	443.0	450.5
Total (Incl. SPR)	1,429.2	1,463.4	1,444.3	1,461.7	1,496.2	1,502.6	1,513.1	1,497.5	1,512.8	1,543.9	1,556.3	1,556.2
<b>1985</b>												
Crude Oil <sup>2</sup>	336.1	325.5	329.1	341.8	356.4	342.9	326.6	317.7	316.6	313.8		
Motor Gasoline	234.0	226.8	220.1	216.6	216.6	219.8	227.6	222.8	224.2	214.3		
Finished Leaded	88.5	82.6	81.3	77.7	75.6	85.2	79.8	78.8	76.4	71.1		
Finished Unleaded	109.3	107.4	105.1	104.4	105.6	101.2	111.9	108.9	110.8	108.0		
Blending Components	36.2	36.8	33.7	34.5	35.3	33.5	35.9	35.1	37.0	35.1		
Jet Fuel	41.0	41.7	44.1	41.7	42.2	42.4	42.6	41.6	42.1	42.2		
Distillate Fuel Oil	141.8	121.5	99.4	97.1	104.6	110.0	115.5	113.7	117.1	121.7		
Residual Fuel Oil	46.8	47.0	46.3	46.6	41.8	40.2	40.8	37.0	42.8	49.6		
Unfinished <sub>3</sub> Oils	100.4	99.7	110.2	113.2	114.0	113.4	111.1	103.2	104.1	107.2		
Other Oils <sup>3</sup>	152.3	145.1	148.5	152.1	159.9	164.7	166.9	169.5	163.8	153.7		
Total (Excl. SPR)	1,052.4	1,007.3	997.7	1,009.0	1,035.6	1,033.4	1,031.1	1,005.4	1,010.6	1,002.5		
Crude Oil in SPR	457.4	460.1	461.6	464.9	471.9	476.6	483.5	487.1	489.3	489.9		
Total (Incl. SPR)	1,509.8	1,467.4	1,459.3	1,474.0	1,507.5	1,510.0	1,514.6	1,492.5	1,499.9	1,492.4		
<b>Week Ending:</b>												
1985-1986	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
Crude Oil <sup>2</sup>	313.0	312.3	310.5	313.9	316.4	322.2	318.6	322.0	320.3	326.9		
Motor Gasoline	215.3	214.9	213.7	214.7	215.6	219.3	220.7	221.8	222.0	226.4		
Finished Leaded	NA	NA	NA	NA	NA	NA	NA	NA	NA	81.1		
Finished Unleaded	NA	NA	NA	NA	NA	NA	NA	NA	NA	110.3		
Blending Components	34.5	35.3	33.7	33.5	33.2	34.5	33.7	34.6	34.3	35.0		
Jet Fuel	42.4	41.8	43.5	43.3	44.4	44.1	42.7	42.3	42.9	40.0		
Distillate Fuel Oil	122.0	123.1	129.3	132.0	136.0	141.4	141.6	139.9	143.3	145.1		
Residual Fuel Oil	49.0	48.7	47.1	46.4	47.1	50.6	49.4	49.7	50.5	49.7		
Unfinished <sub>3</sub> Oils	102.8	101.5	105.7	107.5	106.8	106.6	107.2	108.2	105.4	103.3		
Other Oils <sup>3</sup>	E163.0	E162.7	E162.4	E157.5	E157.2	E155.6	E153.5	E146.6	E144.6	E142.3		
Total (Excl. SPR)	1,007.5	1,005.1	1,012.2	1,015.3	1,023.5	1,039.8	1,033.7	1,030.6	1,029.0	1,033.8		
Crude Oil in SPR	489.9	490.1	490.2	490.8	491.1	491.8	492.1	492.6	492.7	493.3		
Total (Incl. SPR)	1,497.4	1,495.2	1,502.3	1,506.1	1,514.5	1,531.6	1,525.8	1,523.2	1,521.7	1,527.1		

E=Estimated. See Glossary for definition of "Stock Change (Refined Products)" for explanation of other oils estimation methodology.

NA=Not Available.

1 Product stocks include those stocks held at refineries, in pipelines, and at major bulk terminals. Stocks held at natural gas processing plants are included in "Other Oils" and in totals. All stock levels are as of the end of the period.

2 Crude oil stocks include those stocks held at refineries, in pipelines, in lease tanks, and in transit to refineries, and do not include those held in the Strategic Petroleum Reserve.

3 Included are stocks of all other oils such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

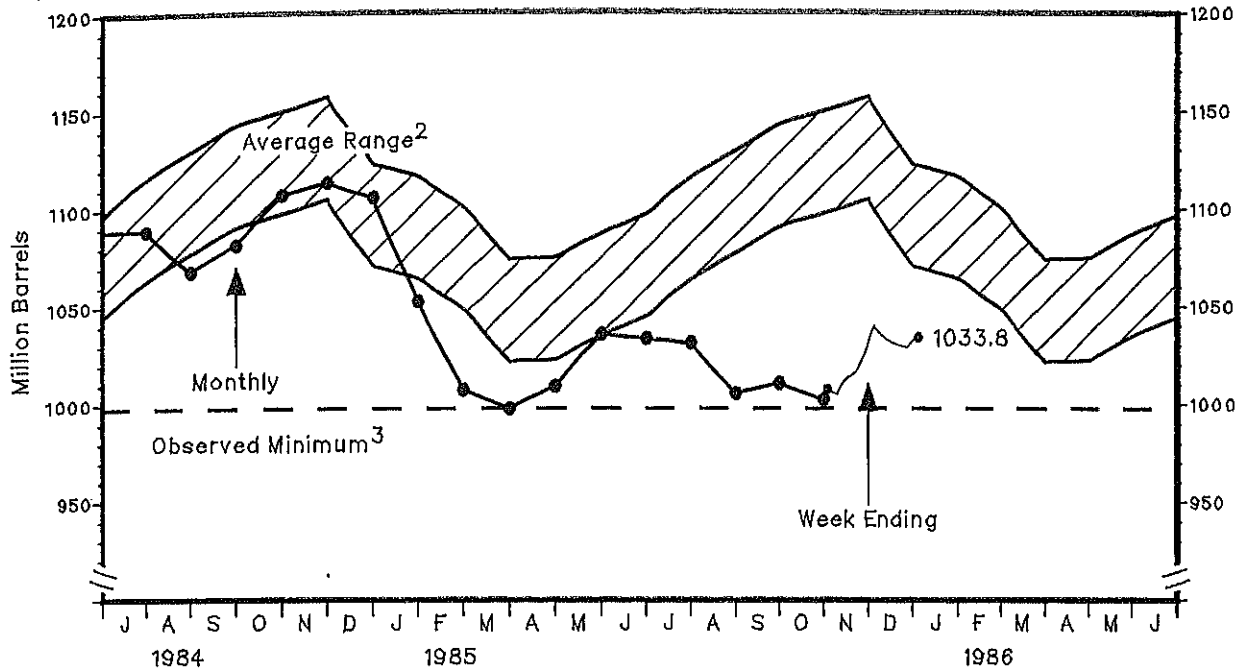
Note: Data may not add to total due to independent rounding.

Source: See Sources Section of this publication.

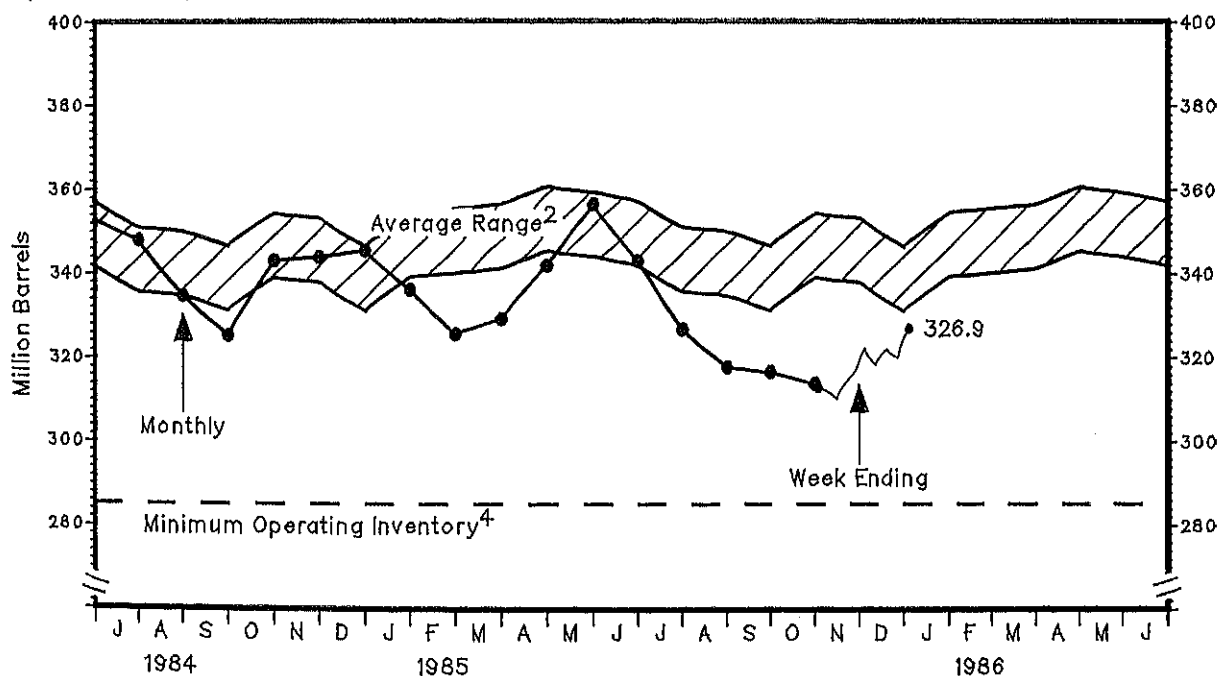


## Stocks

Crude Oil and Petroleum Products, U.S. Total<sup>1</sup>  
(Million Barrels)



Crude Oil, U.S. Total<sup>1</sup>  
(Million Barrels)



<sup>1</sup> Excludes stocks held in the Strategic Petroleum Reserve and includes crude oil in transit to refineries.

<sup>2</sup> Average level and width of average range are based on three years of monthly data: July 1982-June 1985. The seasonal pattern is based on seven years of monthly data. See Appendix B for further explanation.

<sup>3</sup> The observed minimum for total stocks in the last 36-month period, was 997.7 million barrels. It occurred in March 1985. See Appendix B for further explanation.

<sup>4</sup> The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for crude oil to be 285 million barrels. See Appendix B for further explanation.

Source: See Sources Section of this publication.

STOCKS OF MOTOR GASOLINE BY PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT  
(Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>1983</b>										
Finished Motor Gasoline	207.2	206.5	182.7	182.8	185.3	182.8	189.8	184.8	189.3	187.1
Leaded	105.6	104.0	90.8	90.9	93.4	95.1	97.9	95.4	94.6	93.7
Unleaded	101.5	102.5	91.9	91.9	91.9	87.7	91.9	89.4	94.7	93.4
Blending Components	42.5	43.8	40.4	37.9	37.8	39.7	40.7	41.5	39.8	40.3
Total Gasoline	249.7	250.2	223.0	220.7	223.1	222.6	230.5	226.3	229.1	227.4
East Coast (PADD 1)	70.2	66.0	55.3	60.8	63.1	61.3	64.4	62.6	64.1	61.7
Midwest (PADD 2)	75.2	77.4	68.3	65.3	63.7	63.7	64.2	64.4	65.4	64.4
Gulf Coast (PADD 3)	63.9	65.5	65.4	62.6	63.9	64.2	65.3	62.4	64.8	67.9
Rocky Mountain (PADD 4)	9.4	9.4	8.3	7.9	7.4	6.7	6.4	5.9	5.9	6.3
West Coast (PADD 5)	31.0	31.9	25.8	24.1	25.0	26.6	30.3	30.8	28.9	27.1
<b>1984</b>										
Finished Motor Gasoline	185.5	196.6	202.1	207.1	210.4	204.1	199.7	185.9	194.1	193.0
Leaded	92.3	96.5	97.7	100.8	101.0	96.7	91.8	85.4	87.5	84.0
Unleaded	93.3	100.2	104.4	106.4	109.4	107.5	107.9	100.5	106.6	109.0
Blending Components	40.1	40.5	40.5	40.8	42.2	41.4	38.4	38.5	40.0	39.4
Total Gasoline	225.7	237.1	242.6	248.0	252.6	245.5	238.1	224.4	234.1	232.4
East Coast (PADD 1)	61.8	65.2	65.3	66.9	71.1	69.4	71.8	65.4	64.8	63.2
Midwest (PADD 2)	63.2	68.4	70.6	71.4	68.3	65.5	64.6	62.7	66.8	65.5
Gulf Coast (PADD 3)	62.4	66.1	70.9	72.5	72.9	70.9	65.1	62.8	69.5	69.6
Rocky Mountain (PADD 4)	8.4	8.7	9.0	8.7	8.8	7.9	7.5	6.4	6.2	6.3
West Coast (PADD 5)	29.9	28.6	26.8	28.5	31.5	31.7	29.0	27.0	26.8	27.9
<b>1985</b>										
Finished Motor Gasoline	197.8	190.0	186.4	182.0	181.3	186.3	191.7	187.7	187.2	179.1
Leaded	88.5	82.6	81.3	77.7	75.6	85.2	79.8	78.8	76.4	71.1
Unleaded	109.3	107.4	105.1	104.4	105.6	101.2	111.9	108.9	110.8	108.0
Blending Components	36.2	36.8	33.7	34.5	35.3	33.5	35.9	35.1	37.0	35.1
Total Gasoline	234.0	226.8	220.1	216.6	216.6	219.8	227.6	222.8	224.2	214.3
East Coast (PADD 1)	62.3	60.7	61.4	60.0	60.8	62.6	66.3	62.2	60.3	56.5
Midwest (PADD 2)	71.1	67.5	66.1	60.4	55.3	57.9	60.6	64.8	67.3	59.1
Gulf Coast (PADD 3)	59.7	61.1	57.3	60.4	63.2	62.2	64.8	61.9	61.2	63.5
Rocky Mountain (PADD 4)	8.5	8.5	8.2	7.1	7.1	6.7	5.5	5.4	6.0	6.3
West Coast (PADD 5)	32.5	29.1	27.2	28.8	30.2	30.4	30.4	28.4	29.5	28.8
<b>Week Ending:</b>										
1985-1986	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03
Finished Motor Gasoline	180.8	179.6	180.0	181.2	182.4	184.8	187.0	187.2	187.7	191.4
Leaded	NA	NA	NA	NA	NA	NA	NA	NA	NA	81.1
Unleaded	NA	NA	NA	NA	NA	NA	NA	NA	NA	110.3
Blending Components	34.5	35.3	33.7	33.5	33.2	34.5	33.7	34.6	34.3	35.0
Total Gasoline	215.3	214.9	213.7	214.7	215.6	219.3	220.7	221.8	222.0	226.4
East Coast (PADD 1)	57.2	58.4	59.7	61.9	63.6	65.1	64.5	66.0	65.2	66.4
Midwest (PADD 2)	60.0	58.1	58.7	58.9	59.7	59.2	59.1	58.0	59.3	59.5
Gulf Coast (PADD 3)	62.6	63.0	61.0	60.0	59.6	62.0	63.8	64.8	64.0	65.1
Rocky Mountain (PADD 4)	6.4	6.5	6.4	6.1	6.5	6.7	6.6	6.6	6.5	6.8
West Coast (PADD 5)	29.0	28.9	27.9	27.7	26.3	26.4	26.7	26.5	27.0	28.5

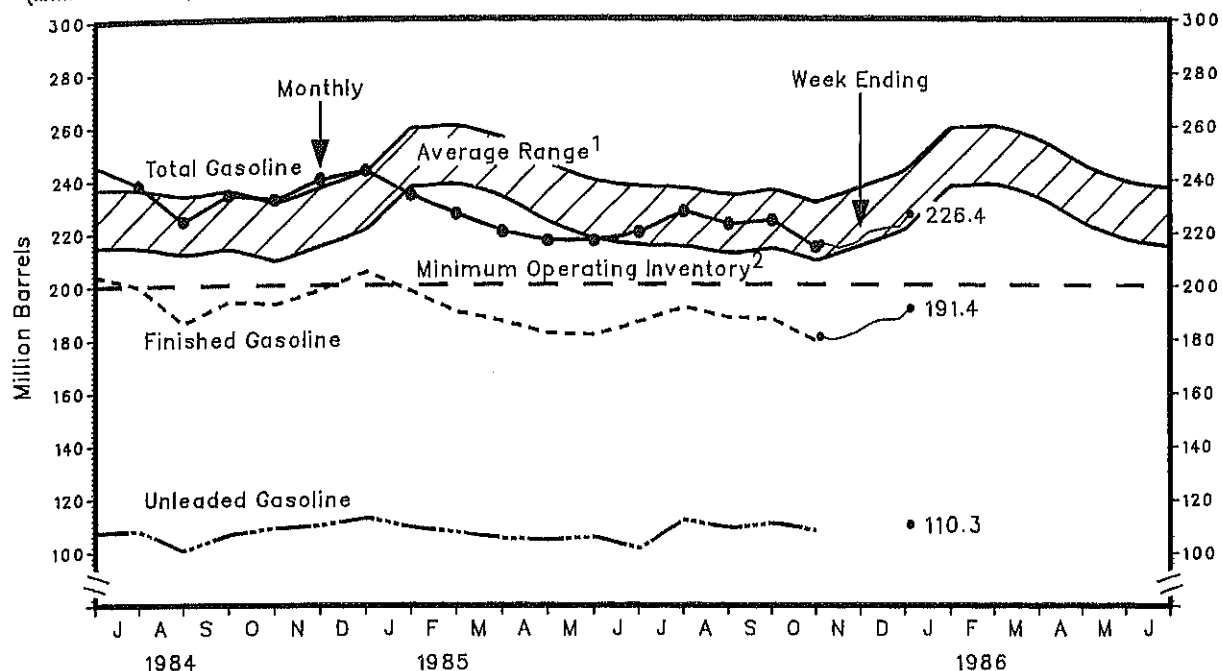
NA=Not Available.

Note: PAD District data may not add to total due to independent rounding.

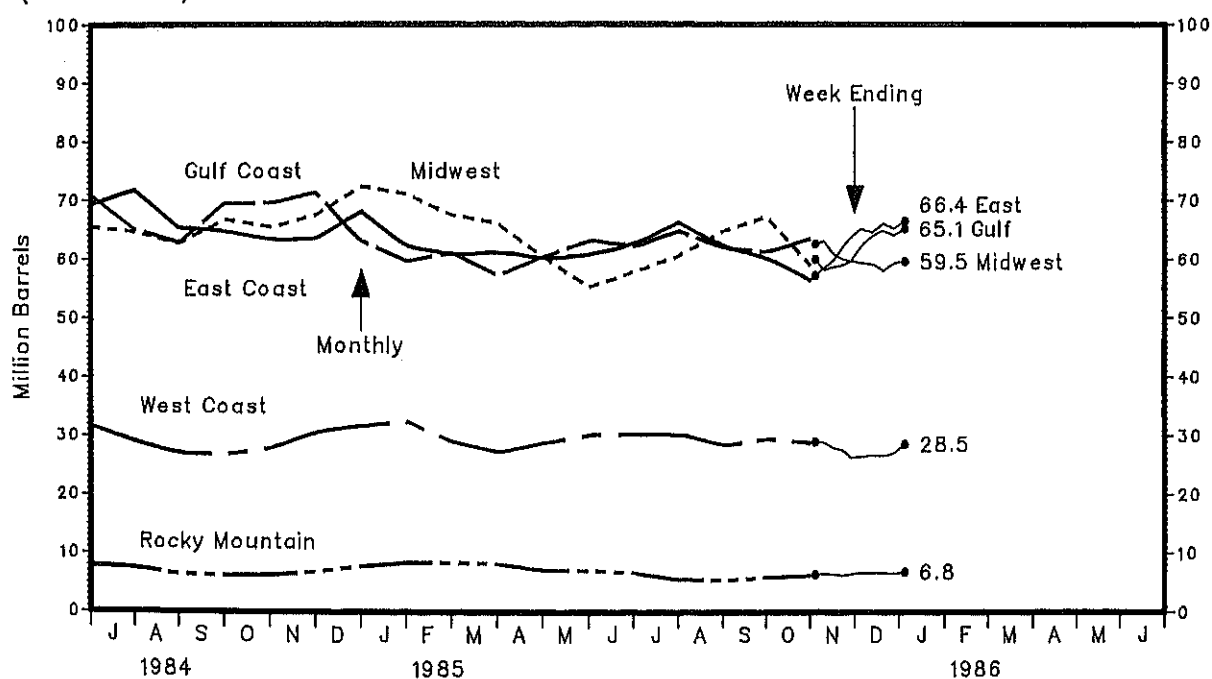
Source: See Sources Section of this publication.

## Stocks

Motor Gasoline, U.S. Total  
(Million Barrels)



Motor Gasoline by Petroleum Administration for Defense District  
(Million Barrels)



1 Average level and width of average range are based on three years of monthly data: July 1982-June 1985. The seasonal pattern is based on seven years of monthly data. See Appendix B for further explanation.

2 The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for total motor gasoline to be 200 million barrels. See Appendix B for further explanation.

Source: See Sources Section of this publication.

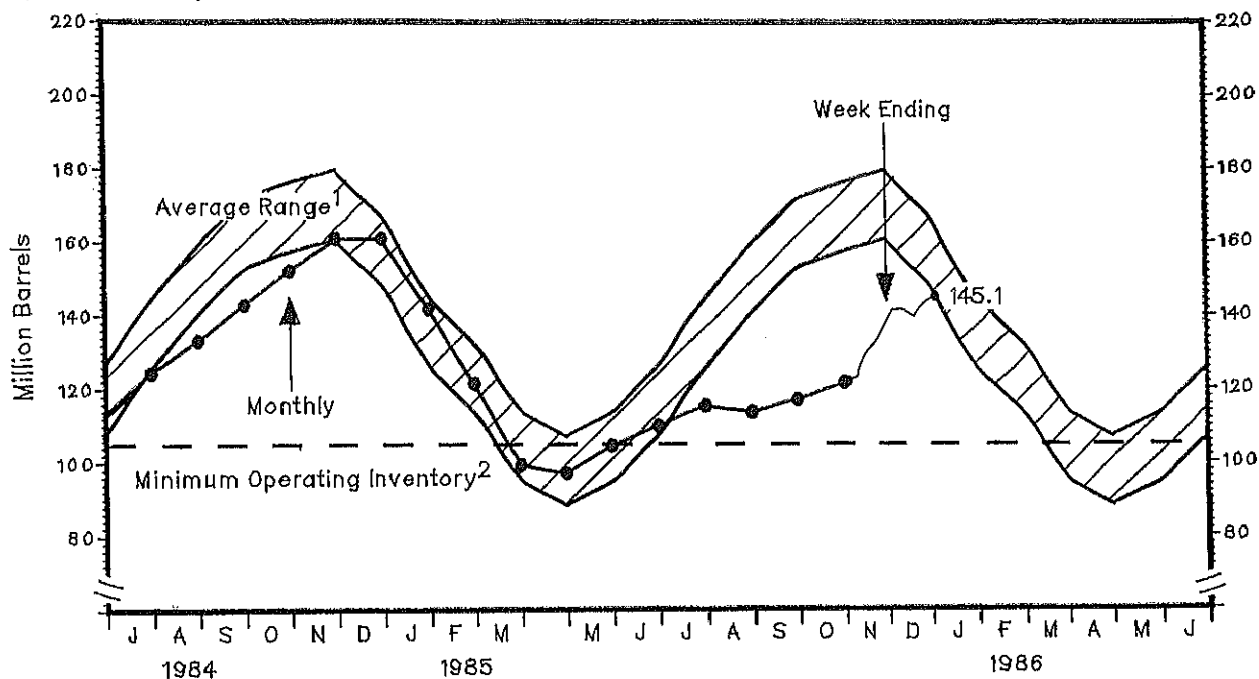
STOCKS OF DISTILLATE FUEL OIL BY PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT  
(Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1983</b>												
Total U.S.	167.6	148.2	118.1	103.1	108.9	113.7	130.7	142.4	154.0	162.6	161.2	140.3
East Coast(PADD 1)	71.1	55.5	38.0	31.8	36.9	41.0	50.9	61.7	67.5	74.6	70.7	57.7
Midwest(PADD 2)	47.1	46.5	39.0	33.2	30.4	29.6	33.3	36.3	38.6	40.3	42.8	40.2
Gulf Coast(PADD 3)	31.2	28.9	26.7	26.0	28.7	29.7	32.4	30.8	34.4	34.4	33.8	27.8
Rocky Mountain(PADD 4)	4.1	4.0	3.3	2.8	2.9	2.8	3.0	3.0	2.7	2.6	2.8	3.3
West Coast(PADD 5)	14.0	13.4	11.1	9.3	9.9	10.6	11.0	10.6	10.8	10.7	11.2	11.3
<b>1984</b>												
Total U.S.	119.3	132.2	109.6	97.7	98.1	112.8	124.4	133.3	142.9	152.2	161.0	161.1
East Coast(PADD 1)	43.3	54.4	37.3	29.8	32.7	40.0	45.3	49.1	57.5	71.7	74.9	72.9
Midwest(PADD 2)	37.1	37.0	33.5	30.1	27.0	31.6	36.1	39.3	38.6	36.4	37.6	43.7
Gulf Coast(PADD 3)	24.6	26.8	24.1	23.0	23.5	26.1	28.2	30.4	32.3	29.9	33.1	28.8
Rocky Mountain(PADD 4)	3.4	3.2	3.3	3.2	3.4	3.5	3.6	3.5	3.3	3.2	3.5	3.7
West Coast(PADD 5)	10.8	10.8	11.3	11.5	11.5	11.6	11.3	11.0	11.2	11.0	11.9	11.9
<b>1985</b>												
Total U.S.	141.8	121.5	99.4	97.1	104.6	110.0	115.5	113.7	117.1	121.7		
East Coast(PADD 1)	55.6	43.4	32.6	31.3	33.6	34.3	38.8	41.0	47.1	50.5		
Midwest(PADD 2)	44.3	40.2	32.2	29.4	30.3	32.6	32.7	32.4	32.7	32.0		
Gulf Coast(PADD 3)	27.4	23.9	21.3	24.2	27.2	28.2	28.2	25.9	24.4	27.5		
Rocky Mountain(PADD 4)	3.7	3.5	2.9	2.3	2.7	3.1	3.1	2.9	2.6	2.2		
West Coast(PADD 5)	10.7	10.5	10.4	9.9	10.9	11.9	12.8	11.5	10.3	9.5		
<b>Week Ending:</b>												
1985-1986	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
Total U.S.	122.0	123.1	129.3	132.0	136.0	141.4	141.6	139.9	143.3	145.1		
East Coast(PADD 1)	51.5	53.4	56.4	57.5	59.9	60.4	60.4	59.8	59.4	58.2		
Midwest(PADD 2)	31.2	32.2	31.5	33.5	32.9	34.5	35.5	35.5	35.8	37.1		
Gulf Coast(PADD 3)	27.3	25.8	28.9	28.2	30.3	32.0	31.8	31.1	33.0	34.5		
Rocky Mountain(PADD 4)	2.1	2.0	2.2	2.3	2.1	2.4	2.6	2.4	2.8	2.9		
West Coast(PADD 5)	9.8	9.6	10.3	10.4	10.8	12.1	11.3	11.1	12.3	12.5		

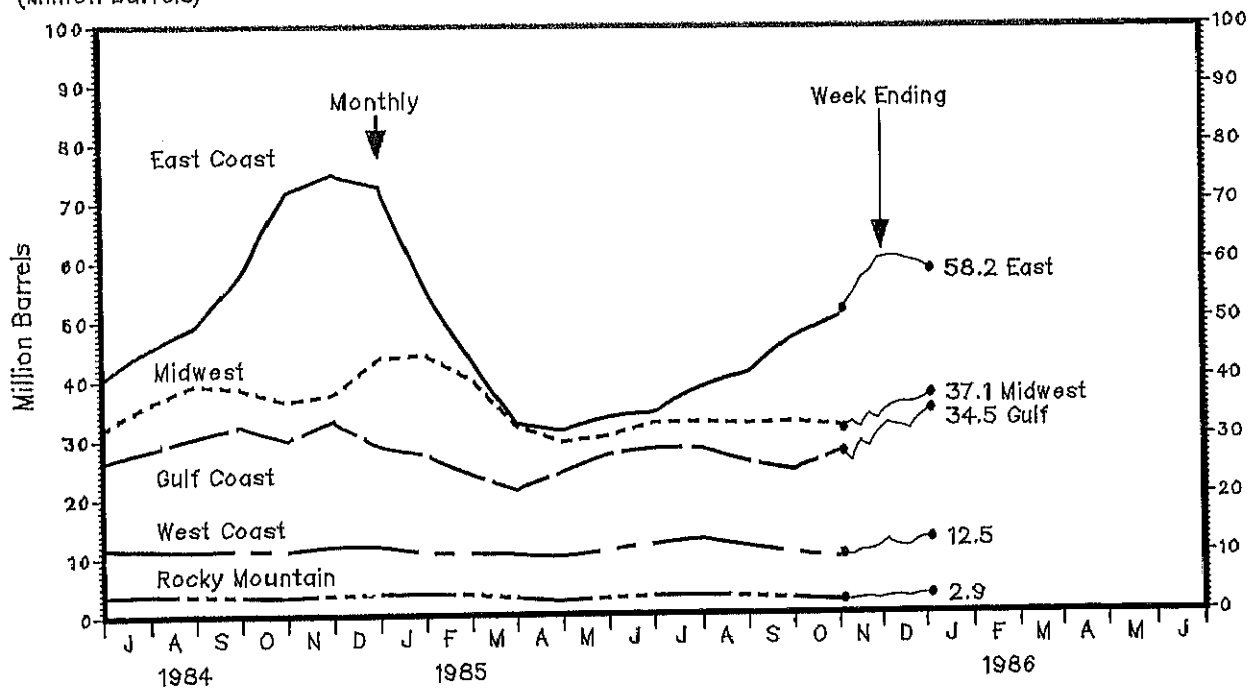
Note: PAD District data may not add to total due to rounding.  
Source: See Sources Section of this publication.

## Stocks

Distillate Fuel Oil, U.S. Total  
(Million Barrels)



Distillate Fuel Oil by Petroleum Administration for Defense District  
(Million Barrels)



<sup>1</sup> Average level and width of average range are based on three years of monthly data: July 1982-June 1985. The seasonal pattern is based on seven years of monthly data. See Appendix B for further explanation.

<sup>2</sup> The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for distillate fuel oil to be 105 million barrels. See Appendix B for further explanation.

Source: See Sources Section of this publication.

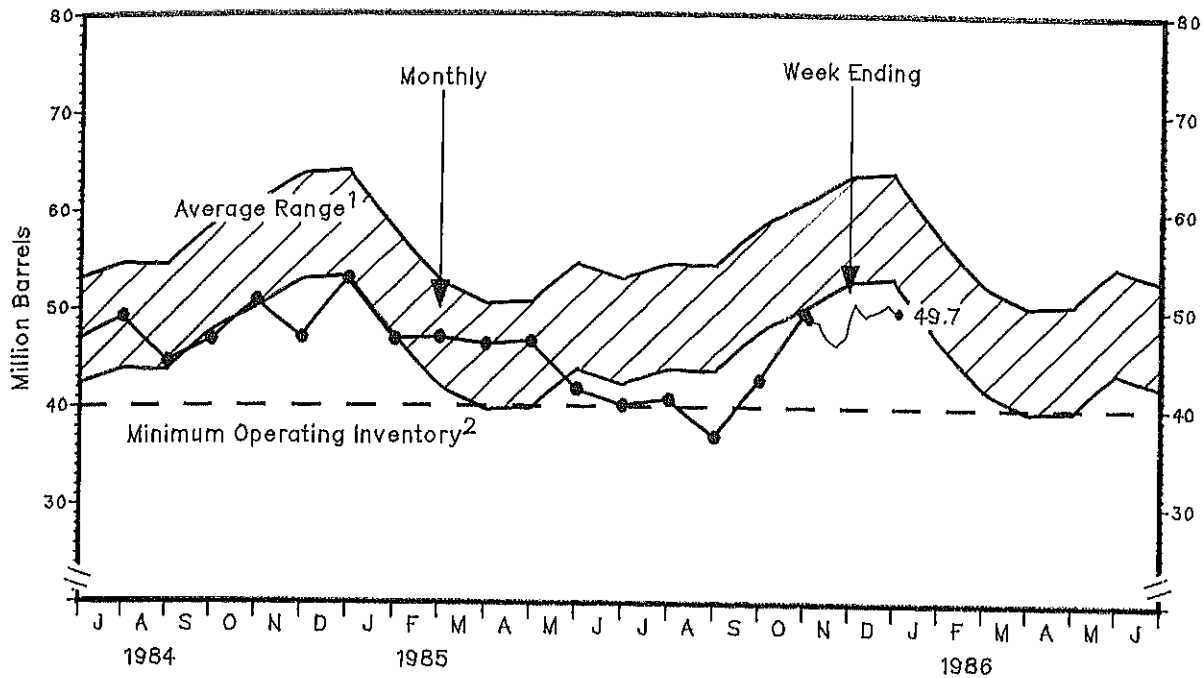
STOCKS OF RESIDUAL FUEL OIL BY PETROLEUM ADMINISTRATION FOR DEFENSE DISTRICT  
(Million Barrels)

Year/District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1983</b>												
Total U.S.	60.5	53.3	46.3	46.6	51.0	49.9	51.9	48.3	49.7	51.2	54.2	48.5
East Coast(PADD 1)	29.8	25.3	20.6	20.2	23.8	24.2	25.3	23.8	23.5	25.2	29.3	24.8
Midwest(PADD 2)	5.0	4.4	3.6	3.4	3.5	3.7	3.7	3.7	3.5	3.8	3.6	4.0
Gulf Coast(PADD 3)	16.2	14.0	12.8	13.4	14.5	13.1	13.7	13.2	13.8	13.5	12.3	11.0
Rocky Mountain(PADD 4)	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.5
West Coast(PADD 5)	8.9	9.1	8.9	9.0	8.5	8.4	8.6	7.1	8.5	8.3	8.5	8.2
<b>1984</b>												
Total U.S.	45.1	57.1	47.9	47.4	46.4	46.9	49.2	44.6	46.8	50.8	47.0	53.0
East Coast(PADD 1)	20.4	30.4	24.4	22.7	23.1	22.0	24.7	21.9	25.0	26.8	24.0	28.9
Midwest(PADD 2)	3.7	4.2	4.1	3.6	4.0	3.6	3.5	3.6	3.5	3.8	3.7	3.5
Gulf Coast(PADD 3)	11.8	12.9	9.9	10.9	10.1	11.2	9.8	9.2	9.8	10.2	10.4	11.2
Rocky Mountain(PADD 4)	0.4	0.4	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.7	0.6	0.6
West Coast(PADD 5)	8.8	9.3	9.0	9.6	8.8	9.6	10.7	9.4	8.1	9.3	8.3	8.7
<b>1985</b>												
Total U.S.	46.8	47.0	46.3	46.6	41.8	40.2	40.8	37.0	42.8	49.6		
East Coast(PADD 1)	23.4	21.8	21.8	20.8	17.7	17.4	18.5	14.6	19.1	24.7		
Midwest(PADD 2)	3.0	3.4	3.5	3.6	3.7	3.7	3.5	3.8	3.4	3.1		
Gulf Coast(PADD 3)	10.7	11.6	11.0	11.7	11.7	10.7	9.7	9.2	11.9	12.8		
Rocky Mountain(PADD 4)	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.5	0.4		
West Coast(PADD 5)	9.1	9.6	9.4	10.0	8.2	7.9	8.7	9.0	7.8	8.7		
<b>Week Ending:</b>												
1985-1986	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
Total U.S.	49.0	48.7	47.1	46.4	47.1	50.6	49.4	49.7	50.5	49.7		
East Coast(PADD 1)	25.8	24.3	23.8	22.8	22.3	24.7	23.6	22.9	23.4	23.1		
Midwest(PADD 2)	3.5	3.4	3.4	4.0	4.4	4.2	4.1	4.3	4.5	4.4		
Gulf Coast(PADD 3)	12.0	12.1	11.1	11.3	11.7	12.0	11.9	12.0	11.7	11.3		
Rocky Mountain(PADD 4)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4		
West Coast(PADD 5)	7.3	8.6	8.4	7.9	8.3	9.3	9.4	10.0	10.5	10.5		

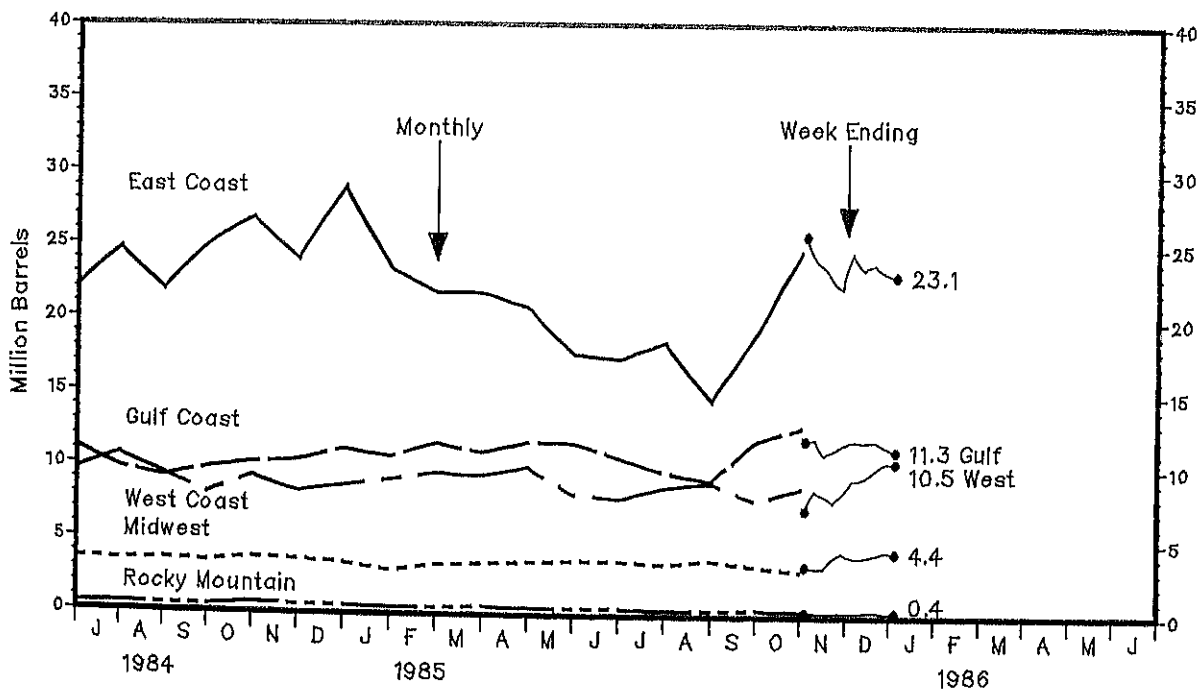
Note: PAD District data may not add to total due to rounding.  
Source: See Sources Section of this publication.

## Stocks

Residual Fuel Oil, U.S. Total  
(Million Barrels)

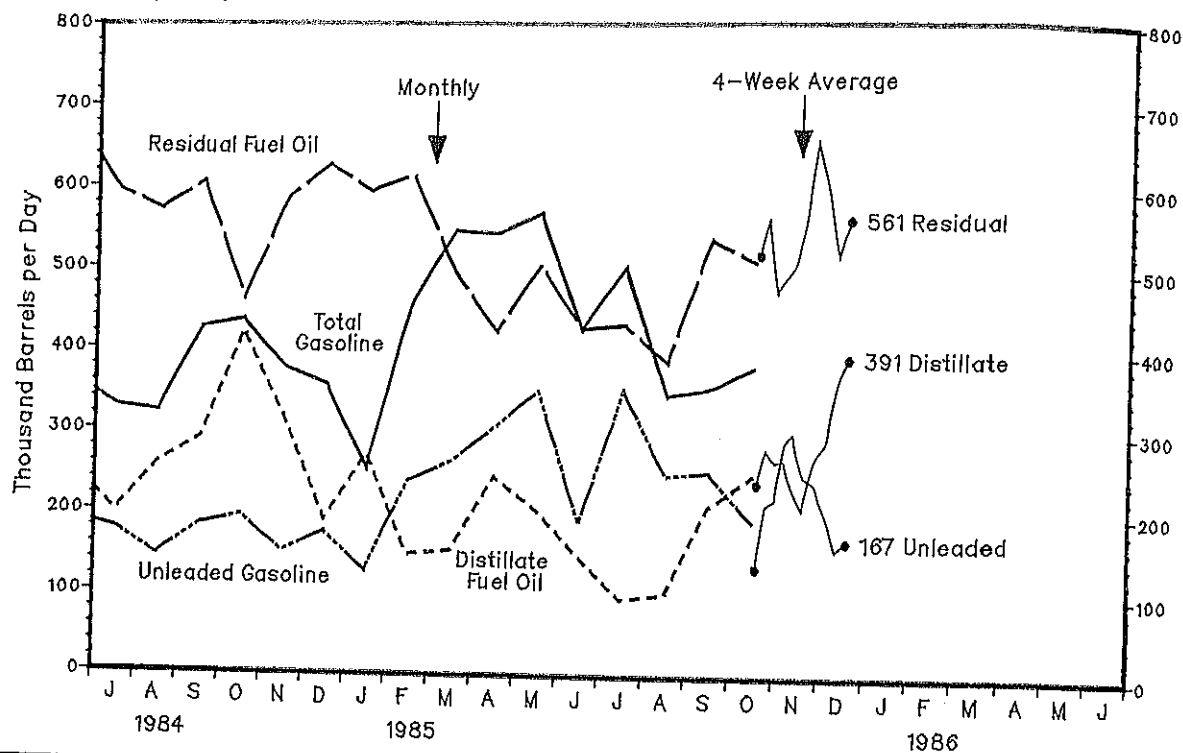


Residual Fuel Oil by Petroleum Administration for Defense District  
(Million Barrels)



1 Average level and width of average range are based on three years of monthly data: July 1982-June 1985. The seasonal pattern is based on seven years of monthly data. See Appendix B for further explanation.  
2 The National Petroleum Council (NPC) defines the Minimum Operating Inventory as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. In its 1983 study, the NPC estimated this inventory level for residual fuel oil to be 40 million barrels. See Appendix B for further explanation.  
Source: See Sources Section of this publication.

IMPORTS OF PETROLEUM PRODUCTS BY PRODUCT  
(Thousand Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1983</b>												
Total Motor Gasoline	190	199	244	300	330	319	347	296	321	367	320	284
Leaded	86	47	112	149	201	141	145	115	172	116	127	102
Unleaded	67	81	74	106	104	136	158	135	107	214	141	122
Blending Components	37	71	58	45	25	42	44	46	41	37	51	61
Jet Fuel	27	8	35	15	29	26	30	40	44	49	23	24
Distillate Fuel Oil	68	59	42	73	147	179	267	301	259	260	203	221
Residual Fuel Oil	691	647	686	753	738	677	684	739	706	638	780	649
Other Petroleum Products <sup>1</sup>	498	546	392	467	486	549	542	555	590	497	547	642
<b>1984</b>												
Total Motor Gasoline	281	358	453	404	465	367	330	323	426	436	378	357
Leaded	98	162	197	178	170	103	68	96	166	113	134	133
Unleaded	133	137	158	140	176	193	179	146	183	195	151	175
Blending Components	50	59	98	85	119	71	83	81	77	128	93	49
Jet Fuel	65	114	49	103	56	52	40	98	33	56	36	39
Distillate Fuel Oil	299	454	115	220	253	256	199	259	291	421	316	190
Residual Fuel Oil	1059	1151	636	651	565	685	597	572	606	461	585	627
Other Petroleum Products <sup>1</sup>	672	665	579	577	698	576	595	543	553	654	688	582
<b>1985</b>												
Total Motor Gasoline	252	454	547	543	568	425	503	345	353	379		
Leaded	75	109	210	170	136	197	75	55	62	131		
Unleaded	128	238	263	305	350	188	351	247	251	191		
Blending Components	48	107	74	68	82	41	77	43	40	56		
Jet Fuel	64	40	46	18	31	35	45	14	35	47		
Distillate Fuel Oil	271	148	153	244	203	147	95	101	208	247		
Residual Fuel Oil	594	614	496	422	505	426	431	386	537	509		
Other Petroleum Products <sup>1</sup>	495	538	640	623	687	669	658	727	631	703		
<b>Average for Four-Week Period Ending:</b>												
<b>1985-1986</b>												
	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
Total Motor Gasoline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Leaded	129	125	109	119	95	109	132	141	166	133		
Unleaded	135	210	218	286	299	249	240	205	157	167		
Blending Components	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Jet Fuel	30	15	35	40	42	44	38	32	22	31		
Distillate Fuel Oil	238	281	266	266	232	207	266	286	360	391		
Residual Fuel Oil	518	563	472	489	503	551	659	600	516	561		
Other Petroleum Products <sup>1</sup>	*588	*573	*618	*590	*684	*694	*651	*669	*602	NA		

NA=Not Available.

\*=Includes motor gasoline blending components.

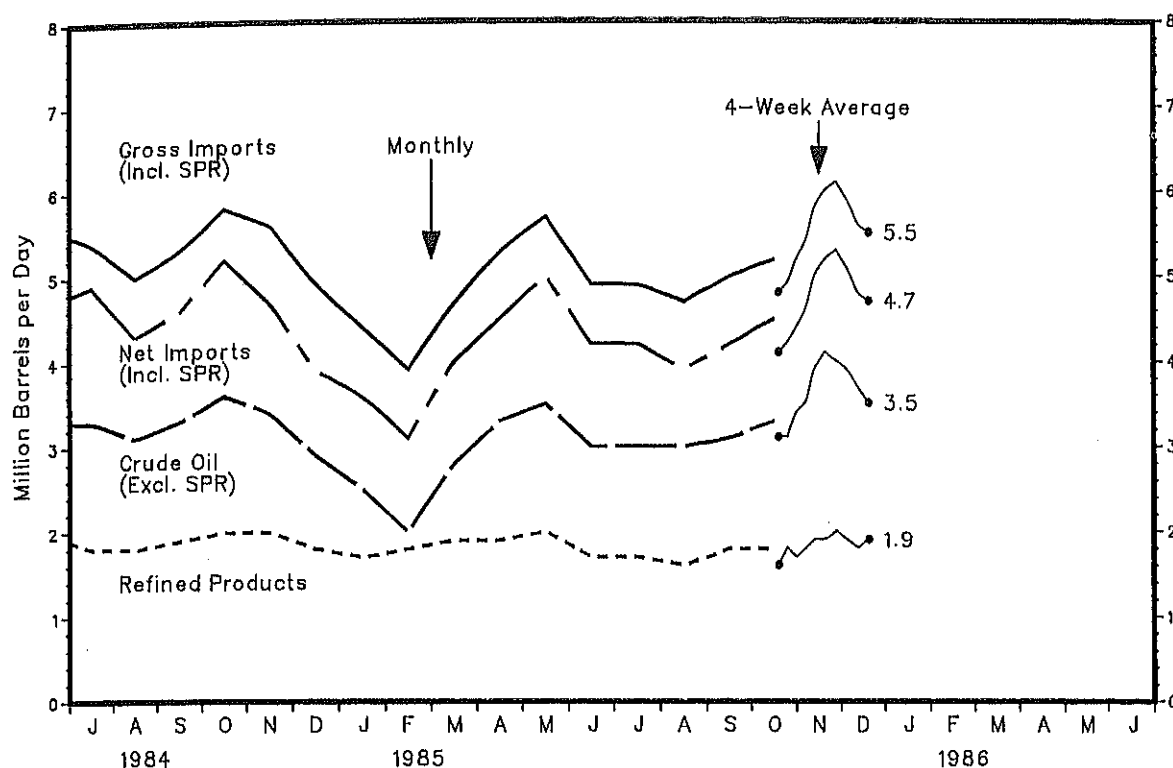
<sup>1</sup> Includes imports of kerosene, unfinished oils, liquefied petroleum gases and other oils.  
Note: Detail data may not add to total due to independent rounding.

Source: See Sources Section of this publication.

Weekly Petroleum Status Report/Energy Information Administration



IMPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS  
(Million Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1983</b>												
Crude Oil (Excl. SPR)	2.7	2.1	2.1	2.9	3.1	3.4	3.6	3.9	3.9	3.2	3.2	3.0
SPR	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.2	0.2	0.2
Refined Products	1.5	1.5	1.4	1.6	1.7	1.7	1.9	1.9	1.9	1.8	1.9	1.8
Gross Imports (Incl. SPR)	4.4	3.7	3.7	4.7	5.1	5.3	5.7	6.2	6.1	5.3	5.2	5.0
Total Exports	1.0	0.9	0.8	0.8	0.8	0.8	0.6	0.7	0.7	0.6	0.7	0.6
Net Imports (Incl. SPR)	3.5	2.9	2.9	3.9	4.2	4.6	5.2	5.5	5.4	4.7	4.5	4.4
<b>1984</b>												
Crude Oil (Excl. SPR)	2.9	2.9	3.3	3.2	3.7	3.2	3.3	3.1	3.3	3.6	3.4	2.9
SPR	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2
Refined Products	2.4	2.7	1.8	2.0	2.0	1.9	1.8	1.8	1.9	2.0	2.0	1.8
Gross Imports (Incl. SPR)	5.4	5.7	5.3	5.4	6.0	5.5	5.4	5.0	5.3	5.8	5.6	4.9
Total Exports	0.6	0.6	0.8	0.7	0.8	0.9	0.5	0.7	0.7	0.6	0.9	1.0
Net Imports (Incl. SPR)	4.9	5.1	4.5	4.7	5.2	4.6	4.9	4.3	4.6	5.2	4.7	
<b>1985</b>												
Crude Oil (Excl. SPR)	2.5	2.0	2.8	3.3	3.5	3.0	3.0	3.0	3.1	3.3		
SPR	0.2	0.1	0.0	0.1	0.2	0.2	0.2					
Refined Products	1.7	1.8	1.9	1.9	2.0	1.7	1.7					
Gross Imports (Incl. SPR)	4.4	3.9	4.7	5.3	5.7							
Total Exports	0.8	0.9	0.7	0.8	0.7							
Net Imports (Incl. SPR)	3.6	3.1	4.0	4.5	5.0							
<b>Average for Four-Week Period Ending:</b>												
<b>1985-1986</b>	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
Crude Oil (Excl. SPR)	3.1	3.1	3.4	3.5	3.9	4.1	4.0	3.9	3.7	3.5		
SPR	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1		
Refined Products	1.6	1.8	1.7	1.8	1.9	1.9	2.0	1.9	1.8	1.9		
Gross Imports (Incl. SPR)	4.8	4.9	5.2	5.4	5.8	6.0	6.1	5.9	5.6	5.5		
Total Exports	E0.7	E0.7	E0.7	E0.8	E0.8	E0.8	E0.8	E0.8	E0.7	E0.7		
Net Imports (Incl. SPR)	4.1	4.2	4.4	4.6	5.0	5.2	5.3	5.1	4.8	4.7		

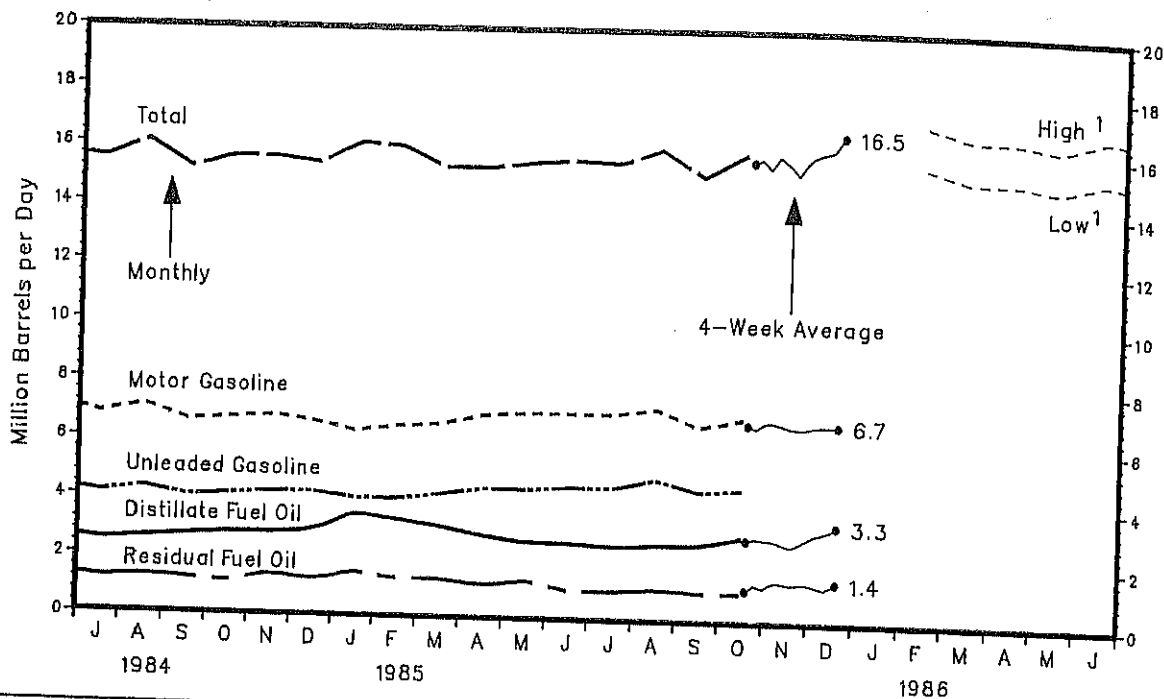
E=Estimate based on most recent monthly data available.

1 Includes exports of crude oil and refined petroleum products. Exports of crude oil are prohibited by law, except to Canada. Crude oil and petroleum products shipped from the U.S. to its territories such as Puerto Rico and the Virgin Islands, and shipments to the Hawaiian Foreign Trade Zone are included in export statistics.

Note: Detail data may not add to total due to independent rounding.

Source: See Sources Section of this publication.

PETROLEUM PRODUCTS SUPPLIED  
(Million Barrels per Day)



Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1983</b>												
Finished Motor Gasoline	6.1	6.0	6.8	6.5	6.6	7.0	6.8	6.9	6.7	6.6	6.6	6.8
Leaded	2.7	2.7	3.2	3.0	3.1	3.2	3.0	3.1	3.0	2.9	2.9	2.9
Unleaded	3.4	3.3	3.6	3.5	3.6	3.8	3.7	3.8	3.7	3.7	3.7	4.0
Jet Fuel	1.0	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.0	1.0	1.2
Distillate Fuel Oil	2.8	2.8	2.9	2.7	2.4	2.5	2.3	2.5	2.6	2.6	2.9	3.4
Residual Fuel Oil	1.6	1.6	1.6	1.4	1.3	1.3	1.3	1.4	1.4	1.2	1.4	1.6
Other	3.3	3.4	3.2	3.1	3.2	3.4	3.6	3.6	3.8	3.5	3.7	3.7
Total	14.7	14.8	15.5	14.7	14.5	15.3	15.0	15.5	15.5	15.0	15.5	16.7
<b>1984</b>												
Finished Motor Gasoline	6.3	6.2	6.5	6.7	6.9	7.1	6.8	7.1	6.6	6.7	6.8	6.6
Leaded	2.7	2.6	2.8	2.8	2.9	2.9	2.8	2.8	2.6	2.6	2.6	2.4
Unleaded	3.6	3.6	3.8	3.9	4.0	4.2	4.1	4.3	4.0	4.1	4.2	4.2
Jet Fuel	1.2	1.1	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2
Distillate Fuel Oil	3.5	2.8	3.3	2.9	2.8	2.6	2.5	2.6	2.7	2.8	2.8	2.9
Residual Fuel Oil	2.0	1.7	1.6	1.4	1.2	1.3	1.2	1.3	1.2	1.1	1.4	1.2
Other	3.8	3.5	3.5	3.4	3.5	3.6	3.7	3.9	3.6	3.8	3.5	3.5
Total	16.8	15.4	16.1	15.6	15.6	15.7	15.5	16.1	15.2	15.6	15.6	15.4
<b>1985</b>												
Finished Motor Gasoline	6.3	6.5	6.6	6.9	7.0	7.0	7.0	7.2	6.6	6.9		
Leaded	2.3	2.5	2.4	2.6	2.6	2.5	2.5	2.5	2.3	2.4		
Unleaded	4.0	4.0	4.2	4.4	4.4	4.5	4.5	4.8	4.4	4.5		
Jet Fuel	1.2	1.1	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2		
Distillate Fuel Oil	3.5	3.3	3.1	2.8	2.6	2.6	2.5	2.6	2.6	2.9		
Residual Fuel Oil	1.5	1.3	1.3	1.1	1.3	1.0	1.0	1.1	1.0	1.0		
Other	3.7	3.7	3.2	3.3	3.4	3.8	3.8	3.8	3.7	3.8		
Total	16.1	16.0	15.3	15.3	15.5	15.6	15.5	16.0	15.1	15.9		
<b>Four-Week Period Ending:</b>												
	11/01	11/08	11/15	11/22	11/29	12/06	12/13	12/20	12/27	01/03		
or Gasoline	6.7	6.6	6.8	6.8	6.7	6.6	6.6	6.7	6.7	6.7		
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Oil	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4		
Oil	2.8	2.9	2.8	2.8	2.7	2.6	2.8	3.0	3.1	3.3		
	1.1	1.3	1.2	1.4	1.4	1.3	1.4	1.3	1.2	1.4		
	3.7	3.6	3.4	3.5	3.4	3.4	3.5	3.5	3.6	3.7		
	15.6	15.7	15.4	15.8	15.6	15.2	15.7	15.9	16.0	16.5		

\*\*\* C for explanation of derivation of values.  
add to total due to independent rounding.  
on of this publication.  
Petroleum Status Report/Energy Information Administration

REFINER ACQUISITION COST OF CRUDE OIL  
(Dollars per Barrel)

Year/Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1983												
Domestic	30.55	29.16	28.69	28.45	28.68	28.67	28.74	28.58	28.69	28.88	28.76	28.62
Imported	31.40	30.76	28.43	27.95	28.53	29.23	28.76	29.50	29.54	29.67	29.09	29.30
Composite	30.73	29.49	28.64	28.33	28.64	28.85	28.75	28.88	28.97	29.14	28.85	28.83
1984												
Domestic	28.62	28.76	28.75	28.63	28.65	28.58	28.70	28.59	28.56	28.46	28.10	27.95
Imported	28.80	28.91	28.95	29.11	29.26	29.19	29.00	28.92	28.70	28.79	28.74	28.02
Composite	28.67	28.81	28.81	28.77	28.83	28.77	28.79	28.69	28.60	28.56	28.30	27.97
1985												
Domestic	26.89	26.39	26.61	26.79	26.90	26.50	26.67	26.45	26.39	P26.58		
Imported	27.51	27.05	27.23	27.61	27.62	27.27	26.46	26.62	26.59	P26.80		
Composite	27.02	26.53	26.77	27.04	27.11	26.69	26.61	26.50	26.44	P26.65		

AVERAGE RETAIL SELLING PRICES  
MOTOR GASOLINE AND RESIDENTIAL HEATING OIL  
(Cents per Gallon, Including Taxes)

Year/Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1983												
Motor Gasoline												
Leaded Regular	114.6	109.9	106.4	113.1	117.7	119.7	120.7	120.3	118.9	117.2	115.6	114.6
Unleaded Premium	137.6	133.8	130.8	136.0	139.7	141.1	142.1	141.9	141.0	139.5	138.4	137.6
Unleaded Regular	122.8	118.7	115.1	121.5	125.9	127.7	128.8	128.5	127.4	125.5	124.1	123.1
All-Types	121.3	117.0	113.5	119.8	124.3	126.1	127.2	126.9	125.7	123.9	122.4	121.5
Residential Heating Oil <sup>1</sup>	115.0	111.6	105.1	103.5	104.8	106.0	105.0	104.9	105.7	106.0	106.0	106.7
1984												
Motor Gasoline												
Leaded Regular	113.1	112.5	112.5	114.5	115.4	114.7	112.9	111.6	112.0	112.7	112.4	110.9
Unleaded Premium	136.9	136.1	136.2	137.5	138.0	137.7	137.0	135.5	136.0	136.5	136.4	135.4
Unleaded Regular	121.6	120.9	121.0	122.7	123.6	122.9	121.2	119.6	120.3	120.9	120.7	119.3
All-Types	120.0	119.3	119.4	121.1	122.1	121.4	119.7	118.4	118.9	119.5	119.3	117.9
Residential Heating Oil <sup>1</sup>	112.0	116.9	111.3	109.8	108.4	107.2	104.8	103.3	103.6	104.9	105.3	104.8
1985												
Motor Gasoline												
Leaded Regular	106.0	104.1	107.1	111.9	114.4	115.3	115.4	114.3	112.9	111.7	112.3	
Unleaded Premium	130.4	129.0	131.0	134.0	136.0	137.1	136.7	135.9	134.9	134.2	133.9	
Unleaded Regular	114.8	113.1	115.9	120.5	123.1	124.1	124.2	122.9	121.6	120.4	120.7	
All-Types	114.5	112.8	115.5	119.9	122.3	123.3	123.3	122.2	120.9	119.8	120.1	
Residential Heating Oil <sup>1</sup>	104.9	105.3	105.0	105.0	103.5	100.8	98.0	97.2	R99.7	P103.3		

R=EIA Revision

P=Preliminary

<sup>1</sup> Residential heating oil prices do not include taxes.

Source: See Sources Section of this publication.

WORLD CRUDE OIL PRICES<sup>1</sup>  
(Dollars per Barrel)

Country	Type of Crude/ API Gravity	Current Price	In Effect 1 Jan 86	In Effect 1 Jan 85	In Effect 1 Jan 84	In Effect 1 Jan 83	In Effect 1 Jan 82	In Effect 1 Jan 81	In Effect 31 Dec 78
<b>OPEC</b>									
Saudi Arabia	Arabian Light 34°	28.00	28.00	29.00	29.00	34.00	34.00	32.00	12.70
Saudi Arabia	Arabian Medium 31°	27.20	27.20	27.65	27.40	32.40	32.40	31.45	12.32
Saudi Arabia	Arabian Heavy 27°	26.00	26.00	26.50	26.00	31.00	31.00	31.00	12.02
Abu Dhabi	Murban 39°	28.15	28.15	29.31	29.56	34.56	35.50	36.56	13.26
Dubai	Fateh 32°	26.80	26.80	28.86	28.86	33.86	33.86	35.93	12.64
Qatar	Dukhan 40°	28.10	28.10	29.24	29.49	34.49	35.45	37.42	13.19
Iran	Iranian Light 34°	28.05 <sup>2</sup>	28.05	28.00	28.00	31.20	34.20	37.00	13.45
Iran	Iranian Heavy 31°	27.35 <sup>2</sup>	27.35	27.10	27.10	29.30	32.30	34.00	12.49
Iraq	Kirkuk Blend 36°	28.18	28.18	29.83	29.83	34.83	34.93	37.50	13.17
Kuwait	Kuwait Blend 31°	27.10	27.10	27.55	27.30	32.30	32.30	35.50	12.22
Neutral Zone	Khafji 28°	26.03	26.03	26.53	26.03	31.03	31.03	25.20	12.03
Algeria	Saharan Blend 44°	29.50	29.50	30.50	30.50	35.50	37.00	40.00	14.10
Nigeria	Bonny Light 37°	28.65	28.65	28.00	30.00	35.50	36.50	40.00	15.12
Nigeria	Forcados 31°	28.05	28.05	27.50	29.00	34.50	36.00	39.80	13.70
Libya	Es Siger 37°	30.15	30.15	30.15	30.15	35.10	36.50	40.78	13.68
Indonesia	Minas 34°	28.53	28.53	29.53	29.53	34.53	35.00	35.00	13.55
Venezuela	Oficina 34°	28.80	28.80	31.09	31.09	37.06	37.06	38.06	13.99
Venezuela	Tia Juana 26°	27.10	27.10	27.88	27.88	32.88	32.88	32.88	12.72
Venezuela	Bachaquero 17°	23.10	23.10	25.50	25.00	25.29	27.79	27.95	11.38
Gabon	Mandji 30°	27.50	27.50	29.00	29.00	34.00	34.00	35.00	12.59
Ecuador	Oriente 30°	26.15	26.15	27.50	27.50	32.50	34.25	40.06	12.35
Total OPEC <sup>4</sup>	NA	27.81	27.81	28.43	28.59	33.54	34.13	34.82	13.03
<b>Non-OPEC</b>									
United Kingdom	Brent Blend 38°	26.00 <sup>5</sup>	26.00	28.65	30.00	33.50	36.60	39.25	NA
Norway	Ekofisk Blend 42°	26.61 <sup>5</sup>	26.61	28.50	30.25	34.25	37.25	40.00	14.20
Mexico	Isthmus 33°	26.21	26.21	29.00	29.00	32.50	35.00	38.50	13.10
Mexico	Maya 22°	21.93	21.93	25.50	25.00	25.50	26.50	34.50	NA
Egypt	Suez Blend 33°	26.70	26.70	28.00	28.00	31.00	34.00	40.50	12.81
Oman	Oman 34°	27.35	27.35	29.00	29.00	34.00	35.00	37.50	13.06
Malaysia	Miri 32°	27.25	27.25	29.85	29.85	35.60	36.50	41.30	14.30
Brunei	Seria Light 37°	28.35	28.35	29.60	30.10	35.10	36.10	40.35	14.15
U.S.S.R.	Export Blend <sup>7</sup> 32°	28.15 <sup>8</sup>	28.15	28.00	28.60	31.20	35.49	39.25	13.20
China	Daqing 33°	25.95 <sup>8</sup>	25.95	28.45	28.70	33.70	34.90	34.63	13.73
Total Non-OPEC <sup>4</sup>	NA	26.14	26.14	28.16	28.65	31.72	34.35	38.54	13.44
Total World <sup>4</sup>	NA	27.10	27.10	28.33	28.61	33.00	34.18	35.49	13.08
United States <sup>9</sup>	NA	25.64	25.64	27.95	28.44	32.51	34.15	36.69	13.38

NA=Not Applicable.

1 Primarily official sales prices or estimated long term contract prices; F.O.B. at the foreign port of lading except where noted; 30 day payment plan except where noted; spot or discount prices excluded. See Appendix D for calculation of world oil prices.

2 Iran offers a \$1.00 discount from this price for war risk if vessel loads at Kharg Island.

3 Also called Sumatra Light.

4 Average prices (FOB) weighted by estimated export volume.

5 Acquisition price which the British National Oil Corporation (BNOC) was willing to pay for June deliveries.

6 On 60 days credit.

7 Average price (CIF) to Northwest Europe, also called Urals.

8 Contract price to Japan.

9 Average prices (FOB) weighted by estimated import volume.

Source: See Sources Section of this publication.



SPOT MARKET PRODUCT PRICES<sup>1</sup>  
(Dollars per Barrel)

		Motor Gasoline		Gasoil/Heating Oil <sup>2</sup>		Residual Fuel Oil <sup>3</sup>	
		Rotterdam (98 Octane)	N.Y. <sup>4</sup> (89 Octane)	Rotterdam (0.5% Sulfur)	N.Y. <sup>5</sup> (0.2% Sulfur)	Rotterdam (1% Sulfur)	N.Y. <sup>4</sup> (1% Sulfur)
	Nov 23	29.37	29.65	32.31	32.13	28.68	28.90
	30	28.78	28.92	29.96	31.50	27.93	28.80
	Dec 7	28.84	29.25	30.43	32.13	27.93	28.80
	14	28.19	28.37	29.96	31.18	27.93	29.00
	21	27.73	28.10	29.76	30.34	28.23	29.00
	28	Not available.					
1985	Jan 4	27.72	28.27	29.35	29.76	28.22	28.25
	11	27.43	28.58	31.09	30.87	28.30	28.25
	18	27.02	28.50	32.23	32.76	28.67	29.25
	25	26.84	29.23	31.76	31.19	28.75	29.45
	Feb 1	26.96	30.43	32.30	31.19	28.15	29.25
	8	27.43	31.29	32.30	31.71	28.75	29.50
	15	28.42	31.29	34.04	31.92	29.20	29.50
	22	29.01	31.84	34.04	32.24	28.97	29.50
	Mar 1	28.78	31.50	31.43	32.34	27.62	29.50
	8	28.83	31.61	32.37	32.76	26.42	28.65
	15	29.42	31.61	32.10	33.12	26.42	27.35
	22	30.48	33.60	32.10	35.81	24.62	27.00
	29	30.59	33.71	32.50	35.39	25.30	26.75
	Apr 5	31.94	34.65	32.10	34.13	25.37	26.65
	12	33.35	34.65	31.56	32.97	25.30	26.25
	19	33.24	34.23	30.83	32.66	25.08	26.00
	26	33.00	34.34	31.03	32.66	23.94	25.75
	May 3	33.35	34.02	29.69	31.61	23.50	25.00
	10	33.35	34.65	28.69	30.77	21.40	23.85
	17	34.29	34.65	29.16	30.24	21.40	21.75
	24	34.17	34.34	29.42	30.03	21.25	22.00
	31	33.59	34.76	29.36	30.14	21.40	22.00
	Jun 7	33.24	34.02	28.55	29.51	21.40	22.00
	14	33.00	34.13	28.95	29.61	21.40	23.50
	21	32.94	34.13	29.49	29.51	21.85	23.10
	28	32.94	33.81	29.02	29.30	21.39	23.25
	Jul 5	Not available.					
	12	33.47	33.81	29.76	28.77	21.55	23.00
	19	33.59	34.86	29.69	28.81	21.55	22.75
	26	33.35	33.81	29.96	28.56	21.55	22.25
	Aug 2	32.77	32.40	29.83	29.08	21.55	22.00
	9	32.77	31.64	29.83	29.97	21.55	22.10
	16	32.77	31.61	29.83	30.87	21.55	23.00
	23	31.24	32.87	32.51	31.02	23.27	23.75
	30	31.13	32.13	33.31	31.82	23.27	25.25
	Sep 6	31.24	32.55	33.71	33.33	23.35	25.25
	13	31.54	32.34	33.11	32.97	23.57	25.00
	20	31.54	32.13	33.85	32.87	23.27	25.50
	27	32.24	33.08	35.05	34.44	23.57	25.50
	Oct 4	33.76	32.76	36.52	35.22	23.57	24.50
	11	32.59	32.76	33.78	33.85	23.57	24.00
	18	32.30	35.07	35.12	34.76	22.82	23.50
	25	32.30	33.73	35.05	35.74	22.82	23.50
	Nov 1	31.88	33.51	36.26	36.64	22.37	23.25
	8	32.12	33.81	36.12	36.33	22.52	23.75
	15	32.12	34.96	37.06	36.68	23.27	24.25
	22	32.29	33.39	38.20	36.89	23.27	25.50
	29	30.12	34.08	38.13	37.21	23.27	25.00
	Dec 6	32.12	32.55	35.15	35.80	24.02	25.00
	13	30.07	30.93	31.90	33.60	21.62	24.25
	20	30.07	28.79	32.30	33.91	21.62	24.25
	27	Not available.					
1986	Jan 3	30.07	29.19	32.57	32.44	22.22	24.50

<sup>1</sup> See Appendix E for explanation of spot market product prices.

<sup>2</sup> Refers to No. 2 Heating Oil.

<sup>3</sup> Refers to No. 6 Oil.

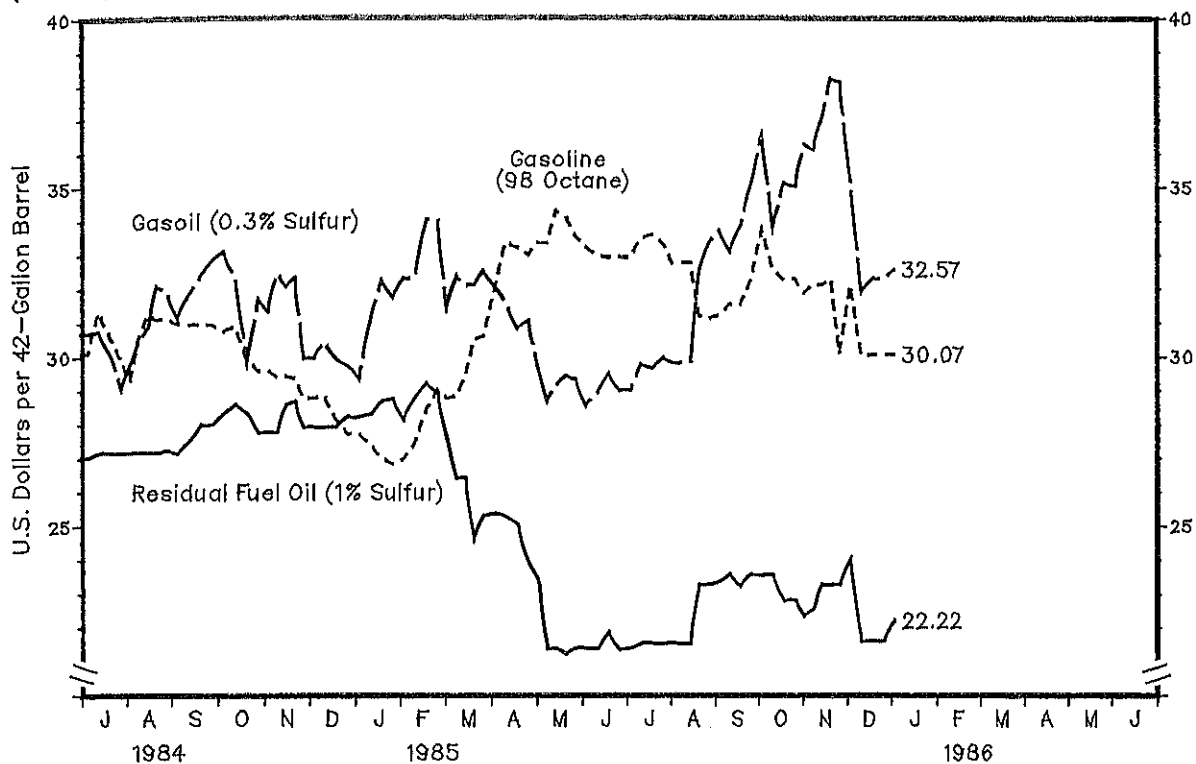
<sup>4</sup> East Coast Cargoes.

<sup>5</sup> New York Harbor Reseller Barge Prices.

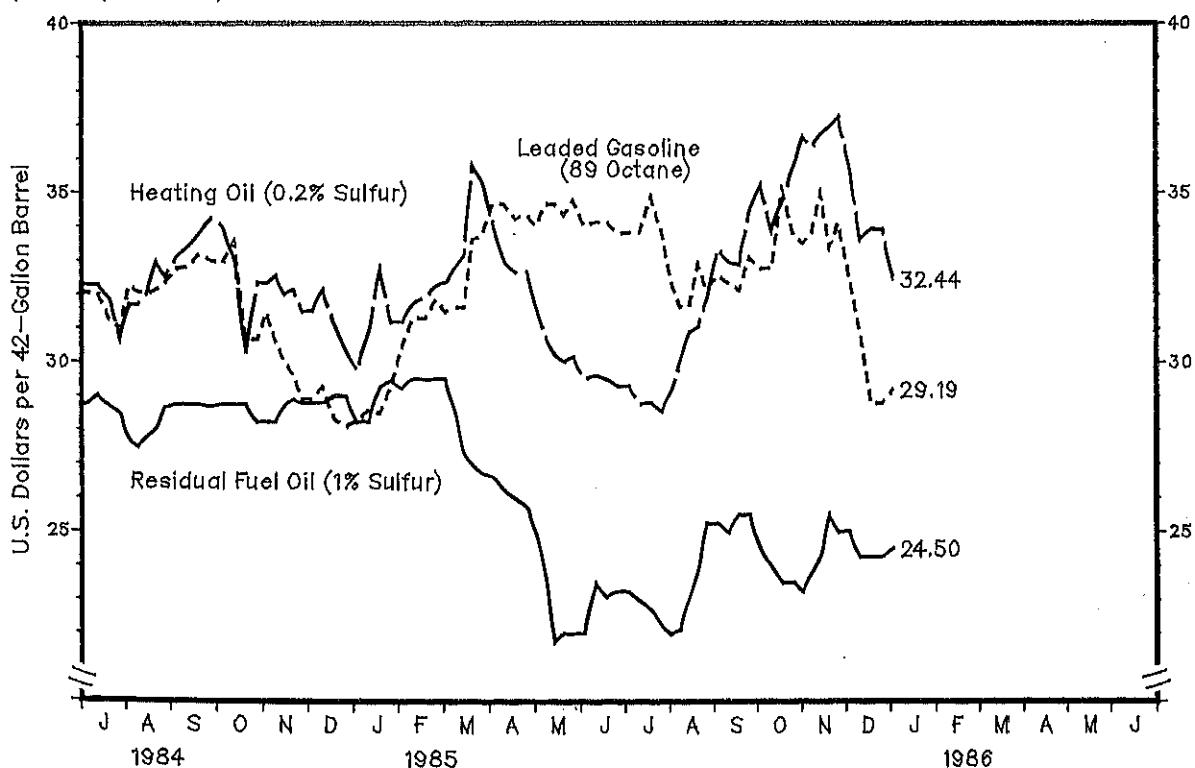
Source: See Sources Section of this publication.

## Spot Market Product Prices

Rotterdam Market  
(Dollars per Barrel)



New York Market  
(Dollars per Barrel)



Source: See Sources Section of this publication.

Week Ending 01/03/86 Weekly Petroleum Status Report/Energy Information Administration

**WEATHER SUMMARY**  
(Population Weighted Heating Degree Days<sup>1</sup>)

Weather data reported in the Weekly Petroleum Status Report are now taken directly from a computer system implemented by the National Oceanic and Atmospheric Administration, Department of Commerce.

The weather for the nation, as measured by population-weighted heating degree-days from July 1, 1985 through January 4, 1986, has been 4 percent cooler than normal and 12 percent cooler than last year.

**U.S. TOTAL HEATING DEGREE DAYS (Population Weighted) and by CITY**

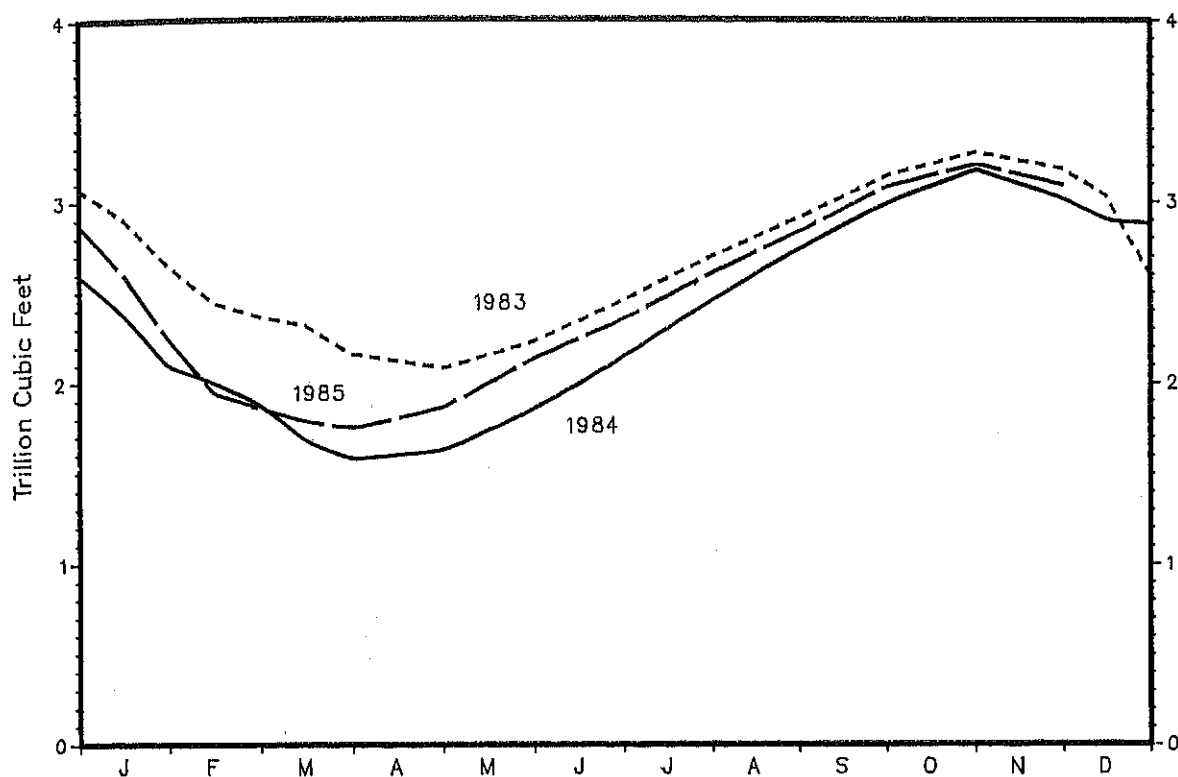
	1985-1986 This Year	1984-1985 Last Year	Normal	Percent Change	
				This Year vs. Last Year	This Year vs. Normal
July 1 - June 30		4,533	4,689	--	--
July 1 - January 4	1,955	1,740	1,878	12	4
<b>Cities</b>					
Albuquerque	1,813	2,128	1,919	-15	-6
Amarillo	2,071	1,814	1,776	14	17
Asheville	1,603	1,507	1,809	6	-11
Atlanta	1,024	885	1,260	16	-19
Billings	3,697	3,430	2,988	8	24
Boise	3,659	3,008	2,489	22	47
Boston	2,135	2,037	2,120	5	1
Buffalo	2,576	2,443	2,620	5	-2
Cheyenne	3,516	3,374	3,007	4	17
Chicago	2,966	2,595	2,535	14	17
Cincinnati	2,076	1,740	2,124	19	-2
Cleveland	2,439	2,207	2,400	11	2
Columbia, SC	935	880	1,109	6	-16
Denver	2,918	2,680	2,482	9	18
Des Moines	3,337	2,677	2,628	25	27
Detroit	2,654	2,402	2,608	10	2
Fargo	4,604	3,917	3,835	18	20
Hartford	2,485	2,243	2,472	11	1
Houston	571	461	638	24	-11
Jacksonville	475	377	572	26	-17
Kansas City	2,653	2,156	2,135	23	24
Las Vegas	991	1,213	1,103	-18	-10
Los Angeles	409	534	542	-23	-25
Memphis	1,283	995	1,334	29	-4
Miami	82	27	54	****	****
Milwaukee	3,115	2,685	2,851	16	9
Minneapolis	3,968	3,326	3,258	19	22
Montgomery	860	625	964	38	-11
New York	1,674	1,506	1,841	11	-9
Oklahoma City	1,787	1,527	1,538	17	16
Omaha	3,239	2,621	2,527	24	28
Philadelphia	1,735	1,659	1,929	5	-10
Phoenix	450	526	592	-14	-24
Pittsburgh	2,261	2,039	2,398	11	-6
Portland, ME	2,800	2,718	2,977	3	-6
Providence	2,173	2,006	2,272	8	-4
Raleigh	1,223	1,176	1,459	4	-16
Richmond	1,351	1,296	1,618	4	-17
St. Louis	2,024	1,783	2,007	14	1
Salem, OR	2,532	2,181	2,080	16	22
Salt Lake City	2,620	2,455	2,457	7	7
San Francisco	1,280	1,141	1,293	12	-1
Seattle	2,513	2,298	2,184	9	15
Shreveport	944	651	950	45	-1
Washington, DC	1,463	1,361	1,625	7	-10

\*\*\*\* = Normal less than 100 or ratio in calculable.

1 See Glossary.



NATURAL GAS IN UNDERGROUND STORAGE  
(Trillion Cubic Feet)



	Working Gas <sup>1</sup>		
	1983	1984	1985
January 15	2,902	2,380	2,603
January 31	2,644	2,091	2,242
February 15	2,433	1,997	1,939
February 28	2,356	1,876	1,853
March 15	2,305	1,670	1,780
March 31	2,148	1,572	1,743
April 30	2,074	1,620	1,859
May 31	2,222	1,843	2,129
June 30	2,454	2,141	2,351
July 31	2,696	2,456	2,605
August 31	2,908	2,739	2,832
September 30	3,141	2,996	3,082
October 31	3,270	3,177	3,207
November 30	3,175	3,017	P3 200
December 15	3,028	2,886	
December 31	2,595	2,570	

P=Preliminary

<sup>1</sup> Working Gas: Gas available for withdrawal.

Source: See Sources Section of this publication.

Weekly Estimates  
(Thousand Barrels per Day Except Where Noted)

Crude Oil Production	12/06/85	12/13/85	12/20/85	12/27/85
Domestic Production.....	E8,930.0	E8,930.0	E8,930.0	E8,930.0
<u>Inputs and Utilizations</u>				
Crude Oil Input.....	12,574.0	12,484.0	12,562.0	12,552.0
Gross Inputs.....	12,798.0	12,707.0	12,690.0	12,714.0
East Coast (PADD 1).....	1,226.0	1,181.0	1,223.0	1,235.0
Midwest (PADD 2).....	2,853.0	2,787.0	2,811.0	2,721.0
Gulf Coast (PADD 3).....	6,043.0	6,032.0	5,987.0	5,977.0
Rocky Mountain (PADD 4).....	421.0	426.0	421.0	412.0
West Coast (PADD 5).....	2,255.0	2,281.0	2,248.0	2,364.0
Operable Capacity (Million Barrels per Day).....	15.8	15.8	15.8	15.8
Percent Utilization.....	81.1	80.5	80.3	80.0
<u>Production by Product</u>				
Finished Motor Gasoline.....	6,350.0	6,845.0	6,617.0	6,502.0
Leaded Gasoline.....	NA	NA	NA	NA
East Coast (PADD 1).....	NA	NA	NA	NA
Midwest (PADD 2).....	NA	NA	NA	NA
Gulf Coast (PADD 3).....	NA	NA	NA	NA
Rocky Mountain (PADD 4).....	NA	NA	NA	NA
West Coast (PADD 5).....	NA	NA	NA	NA
Unleaded Gasoline.....	NA	NA	NA	NA
East Coast (PADD 1).....	NA	NA	NA	NA
Midwest (PADD 2).....	NA	NA	NA	NA
Gulf Coast (PADD 3).....	NA	NA	NA	NA
Rocky Mountain (PADD 4).....	NA	NA	NA	NA
West Coast (PADD 5).....	NA	NA	NA	NA
Jet Fuel.....	1,410.0	1,362.0	1,244.0	1,311.0
Naphtha-Type.....	181.0	244.0	180.0	215.0
Kerosene-Type.....	1,229.0	1,118.0	1,065.0	1,095.0
Distillate Fuel Oil.....	3,177.0	3,014.0	2,985.0	3,175.0
East Coast (PADD 1).....	340.0	286.0	296.0	401.0
Midwest (PADD 2).....	753.0	714.0	769.0	748.0
Gulf Coast (PADD 3).....	1,554.0	1,505.0	1,432.0	1,490.0
Rocky Mountain (PADD 4).....	105.0	115.0	106.0	105.0
West Coast (PADD 5).....	425.0	394.0	382.0	427.0
Residual Fuel Oil.....	978.0	1,010.0	1,003.0	978.0
<u>Imports</u>				
Total Crude Oil incl SPR.....	4,171.0	3,830.0	3,542.0	3,550.0
Crude Oil.....	4,061.0	3,794.0	3,453.0	3,494.0
SPR.....	110.0	36.0	89.0	56.0
Finished Motor Gasoline.....	306.0	351.0	340.0	292.0
Finished Leaded.....	162.0	154.0	177.0	163.0
Finished Unleaded.....	144.0	197.0	163.0	129.0
Blending Components.....	NA	NA	NA	NA
Jet Fuel.....	29.0	60.0	0.0	0.0
Naphtha-Type.....	0.0	0.0	0.0	0.0
Kerosene-Type.....	29.0	60.0	0.0	0.0
Distillate.....	196.0	456.0	318.0	468.0
Residual.....	536.0	748.0	488.0	290.0
Other.....	*596.0	*666.0	*672.0	*472.0
Total Refined Products Imports.....	1,662.0	2,281.0	1,818.0	1,522.0
<u>Exports</u>				
Total.....	E806.0	E806.0	E690.0	E694.0
Crude Oil.....	E188.0	E188.0	E123.0	E123.0
Products.....	E618.0	E618.0	E567.0	E571.0
<u>Products Supplied</u>				
Finished Motor Gasoline.....	6,314.0	6,865.0	6,915.0	6,703.0
Leaded.....	NA	NA	NA	NA
Unleaded.....	NA	NA	NA	NA
Total Jet Fuel.....	1,472.0	1,612.0	1,279.0	1,194.0
Naphtha Jet Fuel.....	216.0	176.0	206.0	154.0
Kerosene Jet Fuel.....	1,256.0	1,436.0	1,073.0	1,040.0
Distillate Fuel Oil.....	2,486.0	3,314.0	3,479.0	3,087.0
Residual Fuel Oil.....	826.0	1,737.0	1,273.0	971.0
Other Oils.....	3,320.0	3,257.0	4,122.0	3,854.0
Total Products Supplied.....	14,421.0	16,790.0	17,069.0	15,805.0

E=Estimate based on monthly data.

N/A=Not Available.

Note: Due to independent rounding, individual product detail may not add to total.

Source: See Sources Section of this publication.

\*=includes motor gasoline blending components.

## Appendix A

### EIA WEEKLY DATA: SURVEY DESIGN AND ESTIMATION METHODS

The Weekly Petroleum Reporting System (WPRS) comprises five surveys: the "Weekly Refinery Report" (EIA-800); the "Weekly Bulk Terminal Report" (EIA-801); the "Weekly Product Pipeline Report" (EIA-802); the "Weekly Crude Oil Stocks Report" (EIA-803); the "Weekly Imports Report" (EIA-804). The EIA weekly reporting system, as part of the Petroleum Supply Reporting System, was designed to collect data similar to those collected monthly. In the WPRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data are used to estimate the published weekly totals.

#### Sample Frame

The sample of companies that report weekly in the WPRS was selected from the universe of companies that report monthly. All sampled companies report data only for facilities in the 50 States and the District of Columbia. The EIA-800 sample frame includes all petroleum refineries in the United States and its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and bulk terminals that blend motor gasoline. The EIA-801 sample frame includes all bulk terminal facilities in the United States and its territories that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-802 sample frame includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate, and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-803 sample frame consists of all companies which carry or store crude oil of 1,000 barrels or more. Included are gathering and trunk pipeline companies (including interstate, intrastate and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water. The EIA-804 sample frame includes all importers of record of crude oil and petroleum products into the United States.

#### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

	Refiners (Refineries)	Bulk Terminals	Product Pipelines	Crude Oil Stock Holders	Importers
Weekly Form	EIA-800	EIA-801	EIA-802	EIA-803	EIA-804
Monthly Frame Size	152(256)	318	89	181	1413
Weekly Sample Size	60(154)	71	50	87	75

#### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. All canvassed firms must file by 5:00 p.m. on the Monday following the close of the report week, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

#### Estimation and Imputation

After the company reports have been checked and entered into the weekly data base, explicit imputation is done for companies which have not yet responded. The imputed values are exponentially smoothed means of recent weekly reported values for this specific company. The imputed values are treated like reported values in the estimation procedure, which calculates ratio estimates of the weekly totals. First, the current week's data for a given product reported by companies in a geographic region are summed. (Call this weekly sum,  $W_t$ ). Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum,  $M_s$ ). Finally, let  $M_t$  be the sum of most recent month's data for the product as reported by all companies. Then, the current week's ratio estimate for that product for all companies,  $W_t$ , is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of total weekly imports is the product of the smoothed ratio and the sum of the weekly reported values and imputed values. Imports of other oils include an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

## Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-800; 75 percent for the EIA-801; 95 percent for the EIA-802; 80 percent for the EIA-803; greater than 95 percent for the EIA-804; and 95 percent for the EIA-805. However, more forms are received the next day, bringing the final response rate to about 95 percent. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The non-response rate for the published estimates is usually between 2 percent and 5 percent.

## Appendix B

### INTERPRETATION AND DERIVATION OF AVERAGE INVENTORY LEVELS

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, and residual fuel oil in this publication include features to assist in comparing current inventory levels with past inventory levels and with judgements of critical levels. Methods used in developing the average inventory levels and minimum operating levels are described below.

#### Average Inventory Levels

The charts displaying inventory levels of crude oil and petroleum products (p.7), crude oil (p.7), motor gasoline (p.9), distillate fuel oil (p.11), and residual fuel oil (p.13) provide the reader with actual inventory levels compared to an "average range" from the most recent 3-year period running from January through December of the previous year. The ranges are updated every six months in April and October. The 3-year period is determined by dropping the oldest 6 months and including the most recent 6 months. The ranges also reflect seasonal variations determined from a longer time period. The seasonal factors, which determine the shape of the upper and lower curves, are updated annually in October, using the most recent year's final monthly data.

The monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Census Bureau (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors were derived using monthly data from 1978-1984.

After seasonal factors are derived, data from the most recent 3-year period (January-December or July-June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard deviation of the deseasonalized 36-months is calculated adjusting for extreme points. The upper curve of the "average range" is defined as the average plus the seasonal factors plus one standard deviation. The lower curve is defined as the average plus the seasonal factors minus one standard deviation. Thus, the width of the "average range" is twice the standard deviation. The values of the upper and lower curves are presented in the table below.

Values of Average Ranges in Inventory Graphs  
(Millions of Barrels)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Lower Range											
Total Petroleum	1064.6	1049.2	1021.8	1022.5	1035.1	1044.4	1063.8	1077.1	1090.9	1097.5	1100.0
Crude Oil	339.1	340.0	341.0	345.3	344.1	341.9	335.7	334.8	331.3	338.9	333.0
Motor Gasoline	237.2	238.5	233.8	223.7	217.1	214.8	214.6	211.5	214.0	209.2	211.0
Distillate Fuel Oil	126.2	114.0	95.3	88.4	94.6	107.0	125.4	140.4	152.9	157.6	161.0
Residual Fuel Oil	47.0	42.0	39.7	39.8	43.8	42.3	43.8	43.7	47.7	50.0	50.0
Upper Range											
Total Petroleum	1116.9	1101.5	1074.0	1074.7	1087.3	1096.7	1116.0	1129.3	1143.2	1149.7	1150.0
Crude Oil	354.4	355.4	356.4	360.6	359.4	357.2	351.0	350.2	346.6	354.2	350.0
Motor Gasoline	259.1	260.4	255.7	245.6	239.0	236.8	236.6	233.4	235.9	231.1	233.0
Distillate Fuel Oil	145.0	132.8	114.1	107.2	113.4	125.8	144.2	159.2	171.7	176.4	181.0
Residual Fuel Oil	57.8	52.8	50.4	50.6	54.6	53.1	54.6	54.4	58.5	60.8	60.0

#### Minimum Operating Inventories

The lines labeled "Minimum Operating Inventory" (MOI) on the stocks graphs for crude oil, motor gasoline, distillate fuel oil, and residual fuel oil represent estimates of those inventory levels made by the National Petroleum Council (NPC) and published in November 1983 in "Petroleum Inventories and Storage Capacity -- Interim Report." The NPC defines the MOI as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. The NPC report presents the findings of a study was directed by the NPC's Committee on Petroleum Inventories and Storage Capacity. MOI estimates presented

the report were developed by consensus through a decision-making process that relied on the judgement of Committee members based on their operating experience, on historical inventory trends, and on the results of an NPC survey of companies that provide primary inventory data to the Energy Information Administration. The estimated values are: Crude oil -- 285 million barrels; motor gasoline -- 200 million barrels; distillate fuel oil -- 105 million barrels; and residual fuel oil -- 40 million barrels.

The NPC did not develop a minimum operating inventory level for total petroleum stocks. The line labeled "observed minimum" on the "Stocks of Crude Oil and Petroleum Products, U.S. Total" graph is the lowest inventory level observed during the most recent 36-month period as published in the Petroleum Supply Monthly.

#### Appendix C

##### PROJECTION FROM THE SHORT-TERM ENERGY OUTLOOK, OCTOBER 1985

The projections of "high" and "low" total petroleum demand, shown in the WPSR as total product supplied, are from the Office of Energy Markets and End Use, Short-Term Energy Outlook (Outlook), October 1985. The three forecast cases presented in this edition of the Outlook, with projections for the last quarter of 1985, through the end of 1986, are based on different assumptions about the growth of the U.S. economy and the associated price of imported crude oil to U.S. refiners.

In the high economic growth case:

- ° One year growth in the real Gross National Product (GNP) is projected to be 2.6 percent for 1985 and 4.5 percent for 1986.
- ° U.S. refiner acquisition costs of imported crude oil are assumed to average \$26.25 a barrel in 1985, and then fall to an average of \$22.00 a barrel in 1986, in current dollars.

In the base case:

- ° One year growth in the GNP is projected to be 2.4 percent for 1985 and 2.1 percent for 1986.
- ° U.S. refiner acquisition costs of imported crude oil are assumed to average \$26.75 a barrel in 1985, and \$25.50 a barrel in 1986, in current dollars.

In the low economic growth case:

- ° One year GNP growth is projected to be 2.4 percent for 1985 and 0.2 percent in 1986.
- ° U.S. refiner acquisition costs of imported crude oil are assumed to average \$27.25 a barrel in 1985, and then rise to \$28.00 in 1986, in current dollars.

The plots of the low and high product supplied estimates incorporate an additional sensitivity adjustment for weather, as estimated in the Short-Term Energy Outlook, Table 13.

For more detailed information on the above (and other components of the forecast), please refer to the published report, Short-Term Energy Outlook, October 1985.

Copies of the report are available from:

National Energy Information Center  
Room 1F-048, Forrestal Building  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585  
Telephone 202-252-8800



# SOURCES

Table 1

- Current Year Data: Estimates based on weekly data collected on Forms EIA-800, -801, -802, -803, and -804; EIA, *Petroleum Supply Monthly*; and EIA, Office of Oil and Gas.
- Previous Year Data: Estimates based on EIA, *Petroleum Supply Annual*.

Table 2

- Monthly Data: 1992-1993, EIA, *Petroleum Supply Monthly*, except for operable capacity for January 1992 which is from the *Petroleum Supply Annual*, 1991.
- Four-Week Averages: Estimates based on weekly data collected on Form EIA-800.

Figure 1

- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, EIA, *Petroleum Supply Monthly*, except for operable capacity for January 1992 which is from the *Petroleum Supply Annual*, 1991.
- Four-Week Averages: Estimates based on weekly data collected on Form EIA-800.

Table 3

- Monthly Data: 1992-1993, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, -802, and -803.

Figure 2

- Data for Ranges and Seasonal Patterns: 1985-1991, EIA, *Petroleum Supply Annual*; 1992, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, -802 and -803.

Table 4

- Monthly Data: 1992-1993, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 3

- Data for Ranges and Seasonal Patterns: 1985-1991, EIA, *Petroleum Supply Annual*; 1992, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Table 5

- Monthly Data: 1992-1993, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 4

- Data for Ranges and Seasonal Patterns: 1985-1991, EIA, *Petroleum Supply Annual*; 1992, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Table 6

- Monthly Data: 1992-1993, EIA, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 5

- Data for Ranges and Seasonal Patterns: 1985-1991, EIA, *Petroleum Supply Annual*; 1992, EIA, *Petroleum Supply Monthly*.
- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, *Petroleum Supply Monthly*.
- Week-Ending Stocks: Estimates based on weekly data collected on Forms EIA-800, -801, and -802.

Figure 6 and Table 7

- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, EIA, *Petroleum Supply Monthly*.
- Four-Week Averages: Estimates based on weekly data collected on Form EIA-804.

Figure 7 and Table 8

- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, EIA, *Petroleum Supply Monthly*.
- Four-Week Averages: Estimates based on weekly data collected on Form EIA-804.

Figure 8 and Table 9

- Monthly Data: 1991, EIA, *Petroleum Supply Annual*; 1992-1993, EIA, *Petroleum Supply Monthly*.
- Four-Week Averages: Estimates based on weekly data collected on Forms EIA-800, -801, -802, -803, and -804.
- Projections: EIA, Office of Energy Markets and End Use (February 1993).

Table 10

- Refiner Acquisition Cost of Crude Oil: Form EIA-14, *Refiners Monthly Cost Report*.

- Platt's Oilgram Price Report.
- Petroleum Intelligence Weekly.
- Bloomberg Oil Buyers' Guide.
- Oil and Gas Journal.

Table 11

- Motor Gasoline - Bureau of Labor Statistics. See glossary description for *Retail Motor Gasoline Prices*.
- Residential Heating Oil - Forms EIA-782A, *Monthly Petroleum Product Sales Report*, and EIA-782B, *Monthly No. 2 Distillate Sales Report*.

Table 13 and Figure 10

- Bloomberg Oil Buyers' Guide.

Table 12 and Figure 9

- EIA, Office of Energy Markets and End Use, Energy Markets and Contingency Information Division.

Table 14

- Estimates based on weekly data collected on Form EIA-800, -801, -802, -803, and -804.



## Appendix A

# Explanatory Notes

## EIA Weekly Data: Survey Design and Estimation Methods

The Weekly Petroleum Supply Reporting System (WPSRS) comprises five surveys: the "Weekly Refinery Report" (EIA-800); the "Weekly Bulk Terminal Report" (EIA-801); the "Weekly Product Pipeline Report" (EIA-802); the "Weekly Crude Oil Stocks Report" (EIA-803); and the "Weekly Imports Report" (EIA-804). The EIA weekly reporting system, as part of the Petroleum Supply Reporting System, was designed to collect data similar to those collected monthly. In the WPSRS, selected petroleum companies report weekly data to EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On the Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. Current weekly data and the most recent monthly data are used to estimate the published weekly totals.

### Sample Frame

The sample of companies that report weekly in the WPSRS was selected from the universe of companies that report monthly. All sampled companies report data only for facilities in the 50 States and the District of Columbia. The EIA-800 sample frame includes all operating and idle petroleum refineries and blending plants in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions. The EIA-801 sample frame includes all bulk terminal facilities in the United States and its possessions that have total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The EIA-802 sample frame includes all petroleum product pipeline companies in the 50 States and the District of Columbia that transport refined petroleum products, including interstate, intrastate, and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies which transport products covered in the weekly survey are included. The EIA-803 sample frame consists of all companies which carry or store 1,000 barrels or more of crude oil. Included are gathering and trunk pipeline companies (including interstate, intrastate and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water in the 50 States and the District of Columbia. The EIA-804 sample frame includes all importers of record of crude oil and petroleum products into the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands and other U.S. possessions, as well as imports from Puerto Rico, the Virgin Islands and other U.S. possessions into the 50 States and the District of Columbia.

### Sampling

The sampling procedure used for the weekly system is the cut-off method. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during

some previous period. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers about 90 percent of the total for each item and each geographic region for which weekly data are published.

	Weekly Form	Monthly Frame Size	Weekly Sample Size
Refiners (Refineries)	EIA-800	168(250)	59(155)
Bulk Terminals	EIA-801	331	78
Product Pipelines	EIA-802	81	46
Crude Oil Stock Holders	EIA-803	162	79
Importers	EIA-804	851	82

## Collection Methods

Data are collected by mail, mailgram, telephone, Telex, Telefax, and electronic transmission on a weekly basis. All canvassed firms must file by 5 p.m. on the Monday following the close of the report week, 7 a.m. Friday. During the processing week, company corrections of the prior week's data are also entered.

## Estimation and Imputation

After the company reports have been checked and entered into the weekly data base, explicit imputation is done for companies which have not yet responded. The imputed values are exponentially smoothed means of recent weekly reported values for this specific company. The imputed values are treated like reported values in the estimation procedure, which calculates ratio estimates of the weekly totals. First, the current week's data for a given product reported by companies in a geographic region are summed. (Call this weekly sum,  $W_s$ .) Next, the most recent month's data for the product reported by those same companies are summed. (Call this monthly sum,  $M_s$ .) Finally, let  $M_t$  be the sum of most recent month's data for the product as reported by all companies. Then, the current week's ratio estimate for that product for all companies,  $W_t$ , is given by:

$$W_t = \frac{M_t}{M_s} \cdot W_s$$

This procedure is used directly to estimate total weekly inputs to refineries and production. To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of total weekly imports is the product of the smoothed ratio and the sum of the weekly reported values and imputed values.

## Response Rates

The response rate as of the day after the filing deadline is about 80 percent for the EIA-800, 75 percent for the EIA-801, 95 percent for the EIA-802, 80 percent for the EIA-803, and greater than 95 percent for the EIA-804. However, more forms are received the next day, bringing the final response rates up. Late respondents are contacted by telephone. Nearly all of the major companies report on time. The nonresponse rate for the published estimates is usually between 1 percent and 2 percent.

## Estimation of Domestic Crude Oil Production

Monthly data on crude oil production for States are reported to the Department of Energy by State conservation agencies. Data on the volume of crude oil produced on Federally-owned offshore leases are reported by the Minerals Management Service, U.S. Department of the Interior. There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly crude oil production information becomes available. In order to present more timely crude oil production volumes, the Energy Information Administration prepares weekly crude oil production estimates which are based on historical production patterns and, where available, other data such as pipeline runs from the Alaskan North Slope during the week. These weekly estimates are presented as the weekly and 4-week average crude oil production volumes shown in this publication. Cumulative crude oil production volumes shown in the U.S. Petroleum Balance Sheet include revised estimates published in the *Petroleum Supply Monthly*.

## Estimation of Exports

Official U.S. exports statistics for crude oil and petroleum products are compiled by the U.S. Bureau of the Census and are published in the *Petroleum Supply Monthly*. The EIA obtains these data on a monthly basis approximately 10 weeks after the close of the reporting month. Beginning with statistics for the first week ending in October 1991, weekly estimates of exports are forecast using an autoregressive integrated moving-average (ARIMA) procedure. The ARIMA procedure models a value as a linear combination of its own past values and present and past values of other related time series. The most recent 5 years of past data are used to obtain the exports forecast. In addition, for the major products and crude oil, 5 years of related price data are used. The price data include some U.S. and some foreign series.

## Data Assessment

The principal objective of the Petroleum Supply Reporting System is to provide an accurate picture of petroleum industry activities and of the availability of petroleum products nationwide from primary distribution channels. The weekly data, which are based on sample estimates stemming largely from preliminary company data, serve as leading indicators of the monthly data. The weekly data are not expected to have the same level of accuracy as the preliminary monthly data when compared with final monthly data. However, the weekly data are expected to exhibit like trends and product flows characteristic of the preliminary and final monthly data.

To assess the accuracy of weekly statistics, monthly estimates derived from weekly estimates are compared with the final monthly aggregates published in the *Petroleum Supply Annual*. Although final monthly data are still subject to error, they have been thoroughly reviewed and edited, they reflect all revisions made during the year and they are considered to be the most accurate data available. The mean absolute percent error provides a measure of the average revisions relative to the aggregates being measured for a variable. The mean absolute percent error for 1988 weekly data was less than 3 percent for 19 of the 30 major petroleum variables analyzed. Most of the variables with mean absolute percent errors of 3 percent or more were for refined products imports series. The mean absolute percent error for total weekly refined products imports was 15 percent for 1988. It should be noted that products imports data are highly variable and cannot be estimated from a sample with the same precision as other petroleum variables. Weekly estimates for refined products imports are almost always low because small companies, which are not in the weekly sample, generally import large volumes of finished products only a few times during the year.

An analytical article, "Timeliness and Accuracy of Petroleum Supply Data," which assesses the differences between interim and final data on the 30 major petroleum variables, is published in the *Petroleum Supply Monthly* once each year.

## Interpretation and Derivation of Average Inventory Levels

The national inventory (stocks) graphs for total petroleum products, crude oil, motor gasoline, distillate fuel oil, and residual fuel oil in this publication include features to assist in comparing current inventory levels with past inventory levels and with judgments of critical levels. Methods used in developing the average inventory levels and minimum operating levels are described below.

### Average Inventory Levels

The charts displaying inventory levels of crude oil and petroleum products (p.7), crude oil (p.7), motor gasoline (p.9), distillate fuel oil (p.11), and residual fuel oil (p.13) provide the reader with actual inventory data compared to an "average range" for the most recent 3-year period running from January through December or from July through June. The ranges also reflect seasonal variation for the past 7 years.

The seasonal factors, which determine the shape of the upper and lower curves, are estimated with a seasonal adjustment technique developed at the Bureau of Census (Census X-11). The seasonal factors are assumed to be stable (i.e., the same seasonal factor is used for each January during the 7-year period) and additive (i.e., the series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported inventory levels). The intent of deseasonalization is to remove only annual variation from the data. Thus, deseasonalized series would contain the same trends, cyclical components, and irregularities as the original data. The seasonal factors are updated annually in October, using the 7 most recent years' final monthly data.

**Table A1. Values of Average Ranges in Inventory Graphs**  
(Million Barrels)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lower Range												
Total Petroleum.....	1,029.6	1,010.9	994.2	999.0	1,024.3	1,029.3	1,049.9	1,049.3	1,060.6	1,053.0	1,058.5	1,031.1
Crude Oil.....	327.4	329.1	335.0	335.5	340.5	334.1	332.7	328.8	324.8	331.3	333.6	324.7
Motor Gasoline .....	225.4	227.3	213.4	210.1	208.6	203.9	208.4	205.3	212.2	204.0	207.3	210.4
Distillate Fuel Oil.....	123.9	107.0	95.0	94.4	97.8	102.6	114.7	121.2	129.1	126.9	131.0	131.5
Residual Fuel Oil .....	45.6	43.0	40.4	39.5	42.0	41.3	41.6	41.4	44.2	45.5	47.0	46.1
Upper Range												
Total Petroleum.....	1,072.0	1,053.4	1,036.7	1,041.4	1,066.8	1,071.7	1,092.3	1,091.8	1,103.1	1,095.4	1,100.9	1,073.5
Crude Oil.....	351.4	353.1	359.0	359.4	364.5	358.1	356.7	352.8	348.8	355.2	357.6	348.7
Motor Gasoline .....	237.3	239.2	225.3	222.0	220.5	215.9	220.3	217.2	224.1	215.9	219.2	222.3
Distillate Fuel Oil.....	133.9	116.9	104.9	104.3	107.7	112.5	124.6	131.1	139.0	136.8	140.9	141.4
Residual Fuel Oil .....	51.3	48.7	46.1	45.2	47.7	47.0	47.3	47.1	49.9	51.2	52.7	51.8

The seasonal factors are used to deseasonalize data from the most recent 3-year period (January-December or July-June) in order to determine a deseasonalized average band. The average of the deseasonalized 36-month series is the midpoint of the band, and two standard deviations of the series (adjusting first for extreme points) is its width. When the seasonal factors are added back in (the upper curve is the midpoint plus one standard deviation plus the seasonal factor, and the lower curve is the midpoint minus one standard deviation plus the seasonal factor), the "average range" shown on the graphs reflects the actual data. The ranges are updated every 6 months in April and October (Table A1).

### Minimum Observed Inventories

The lines labeled "observed minimum" on the stock graphs are the lowest inventory levels observed during the most recent 36-month period as published in the *Petroleum Supply Monthly*.

### Projections from the Short-Term Energy Outlook, First Quarter 1993

The mid-price case for petroleum demands presented in the first quarter 1993 *Short-Term Energy Outlook* reflect the assumptions of real gross domestic product (GDP) growth of 2.6 percent in 1993 and 3.1 percent in 1994, and normal weather, as measured in number of heating and cooling degree days. In order to provide plausible ranges for the petroleum projections, ranges of macroeconomic, price, and weather assumptions are used.

The upper demand bound reflects an assumed combination of lower oil prices, higher economic growth, and more severe weather than those of the base case. In this scenario, real gross domestic product is expected to increase by 3.9 percent in 1993 and by 3.9 percent in 1994, and weather (in terms of heating degree-days) is assumed to be about 10 percent colder than the base case beginning with the first quarter of 1993. The lower product supplied bound assumes that real gross domestic product increases by 1.3 percent in 1993 and by 2.2 percent in 1994 and that weather is substantially milder than in the base case.

Weather sensitivities are based on assumed deviations above and below normal that correspond to one-half of the largest quarterly deviations from normal in heating and cooling degree days over the last 15 years. Average petroleum sensitivity factors for this forecast are summarized below:

- A 1-percent increase in real GDP raises petroleum demand by about 141,000 barrels per day.
- A \$1-per-barrel increase in crude oil prices, assuming no price response from nonpetroleum energy sources, reduces demand by about 36,000 barrels per day.
- A 1-percent increase in heating degree-days increases demand by about 37,000 barrels per day; a 1-percent increase in cooling degree-days increases petroleum demand by about 10,000 barrels per day.

For more detailed information on the forecast, please refer to the published report, First Quarter 1993 *Short-Term Energy Outlook*. Copies of the report are available from:

National Energy Information Center  
Room 1F-048, Forrestal Building  
1000 Independence Avenue, S.W.  
Washington, DC 20585  
Telephone (202) 586-8800

### Calculation of World Oil Price

The weighted average international price of oil, shown in the "Highlights" on page 1 and on page 18, is an average calculated using specific crude oil prices weighted by the estimated crude oil export volume for each oil-producing country. To develop the table shown on page 18, a list of major oil producing/exporting countries was chosen. For each country, the contract selling price of one or more representative crude oils was determined by investigating a number of industry publications (i.e., "Oil Buyers' Guide", "Platt's Oilgram Price Report", "Petroleum Intelligence Weekly", and "Weekly Petroleum Argus") and by contacting oil market analysts.

Then, the appropriate crude oil volumes to be used as weighting factors for each country were determined. These volumes are estimates based on a number of sources which provide data on production, consumption, and exports for these countries. Export volumes for a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors. After the export volumes had been determined, simple mathematical weighted averages were calculated to arrive at the "Total OPEC," "Total Non-OPEC," and "Total World" prices.

The average United States (FOB) import price is derived by the same basic procedure as the world oil price, that is, taking the representative contract crude oil price of a specific crude oil from a particular country and weighting this price by a certain volume of crude oil. In this case, the weighting factors are the volumes of crude oil imported into the U.S. from pertinent countries. Import volumes from a number of smaller producing/exporting countries, not listed in the table, are included in the weighting factors.

Both the import and export volumes are preliminary. Due to their origin, these estimates cannot be fully verified. These volumes are updated monthly, or more frequently when changes in oil market conditions make updating appropriate.

## Explanation and Coverage of Spot Market Product Prices

Definition of spot market product prices for the Rotterdam market: Represent the mid point of the bid/asked price range for CIF cargoes scheduled for prompt arrival at Rotterdam (within 48 hours).

Definition of spot market product prices for the New York market: Represent last sale price reported or offered. Prices are ex-duty and do not include Federal or State taxes.

General definition of spot prices: A transaction concluded "at the spot," that is, on a one-time prompt delivery basis, usually referring to a transaction involving only one cargo of product. This contrasts with a term contract sale which obligates the seller to furnish product on an evenly-spread delivery basis over an extended period of time, usually for 1 year.

Coverage of petroleum product prices is restricted to and updated according to the major products traded. Major products are determined by the highest number of transactions and the highest volumes of product traded, e.g., 1987 replacement of the New York leaded regular gasoline series with the unleaded regular gasoline series.

## Appendix B

# EIA-819M

# Monthly Oxygenate Telephone Report

The 819M, "Monthly Oxygenate Telephone Report," provides production data and preliminary stock data for fuel ethanol and methyl tertiary butyl ether (MTBE) in the United States and major U.S. geographic regions. These data have been published in the *Weekly Petroleum Status Report* (WPSR) and the *Petroleum Supply Monthly* (PSM) since March 1992.

Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System surveys. Final data on production and stocks of fuel ethanol and MTBE are presented in the Detailed Statistics section of the *PSM* beginning with the March 1993 issue. The quantity of oxygenates blended into motor gasoline previously published in this appendix is now presented in the Highlights section of the *PSM*.

Table B1. U.S. Summary Table, March 1993

Products	March 1993		February 1993		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
<b>Fuel Ethanol</b>						
Production.....	2,373	77	2,049	73	6,785	75
Stocks.....	1,878	--	1,929	--	1,878	--
<b>MTBE</b>						
Production.....	3,472	112	3,180	114	10,208	113
Stocks.....	10,550	--	10,148	--	10,550	--

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

**Table B2. Monthly Fuel Ethanol Production and Stocks by Petroleum Administration  
for Defense Districts (PADD)**  
(Thousand Barrels per Day, Except Where Noted)

District/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Total U.S.</b>												
Production												
1992	78	71	68	68	68	66	66	70	67	74	74	75
1993	76	73	77									
Stocks (thous. bbls.)												
1992	1,076	1,287	1,462	1,457	1,858	1,941	2,362	2,530	2,973	2,980	2,547	1,791
1993	2,036	1,929	1,878									
<b>East Coast (PADD I)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	85	93	100	82	88	67	200	207	177	163	139	99
1993	117	64	62									
<b>Midwest (PADD II)</b>												
Production												
1992	73	66	63	64	64	61	61	66	66	72	72	73
1993	74	71	75									
Stocks (thous. bbls.)												
1992	532	662	791	794	1,010	1,143	1,344	1,361	1,639	1,553	1,279	889
1993	1,094	1,124	1,143									
<b>Gulf Coast (PADD III)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	248	344	394	452	530	464	562	612	405	477	465	254
1993	203	244	216									
<b>Rocky Mountain (PADD IV)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	27	11	20	14	15	12	17	20	21	44	69	70
1993	61	44	45									
<b>West Coast (PADD V)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	184	177	156	114	214	254	240	330	732	743	604	479
1993	561	453	412									

W = Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

**Table B3. Monthly Methyl Tertiary Butyl Ether (MTBE) Production, and Stocks  
by Petroleum Administration for Defense Districts (PADD)**  
(Thousand Barrels per Day, Except Where Noted)

District/Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Total U.S.</b>												
Production												
1992	98	94	89	79	90	90	101	91	104	118	128	125
1993	115	114	112									
Stocks (thous. bbls.)												
1992	11,999	12,681	13,966	14,962	15,961	18,887	20,436	23,131	22,853	19,208	16,342	13,818
1993	10,648	10,148	10,550									
<b>East Coast (PADD I)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	3,086	2,944	3,551	3,929	4,453	4,663	4,824	5,046	4,875	3,839	3,098	2,613
1993	1,881	1,833	1,492									
<b>Midwest (PADD II)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
<b>Gulf Coast (PADD III)</b>												
Production												
1992	88	82	77	69	77	77	88	78	93	108	118	114
1993	102	101	99									
Stocks (thous. bbls.)												
1992	5,104	5,711	6,058	6,728	6,870	8,549	8,928	9,847	9,192	8,309	7,380	6,159
1993	4,987	4,707	5,304									
<b>Rocky Mountain (PADD IV)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
<b>West Coast (PADD V)</b>												
Production												
1992	W	W	W	W	W	W	W	W	W	W	W	W
1993	W	W	W									
Stocks (thous. bbls.)												
1992	3,418	3,673	4,011	4,064	4,309	5,385	6,419	7,936	8,466	6,723	5,543	4,768
1993	3,536	3,333	3,516									

W = Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."





# Form EIA-819M Monthly Oxygenate Report Explanatory Notes

## Background

Beginning November 1992, the Clean Air Act Amendments of 1990 required that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during wintertime months. Beginning in 1995 further requirements are that only reformulated gasoline having an average oxygen content of 2.0 percent be sold in the nine worst ozone nonattainment areas.

In 1992, the Energy Information Administration (EIA) conducted a frame identifier survey of companies that produce, blend, store, or import oxygenates. The purpose of this survey was to (1) identify all U.S. producers, blenders, storers, and importers of oxygenates; and (2) collect supply, and blending data for January - June, 1992 inventory data on those oxygenates blended into motor gasoline.

## Overview

In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA has begun an oxygenate data collection program. The Form EIA-819M, "Monthly Oxygenate Telephone Report" collects information on oxygenate production, imports, and stocks by Petroleum Administration for Defense Districts (PADD's). Data are aggregated and presented on Tables B1-B5 of this appendix as follows:

Table B1: U.S. Summary Table, Current Month

Table B2: Monthly Fuel Ethanol Production and Stocks, by PADD

Table B3: Monthly Methyl Tertiary Butyl Ether (MTBE) Production, and Stocks, by PADD

All data are displayed in thousand barrels (42 U.S. Gallons per Barrel) or thousand barrels per day.

## Collection Methods

Data for the EIA-819M survey are collected beginning on the fifth working day of each month. Information is solicited by telephone or can be transmitted to the EIA by facsimile. Receipt of the data is monitored using an automated respondent mailing list. Additional follow-up telephone calls are made to nonrespondents prior to the publication deadline.

## Sample Frame

The sample of companies that report on the Form EIA-819M was selected from the universe of companies that reported on the Form EIA-822A/D, "Oxygenate Operations Identification Survey". The universe consisted of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations); (2) operators of petroleum refineries; (3) operators of bulk terminals, bulk stations, blending plants, and other non-refinery facilities that store and/or blend oxygenates; and (4) importers of oxygenates (importer of record) located in or importing oxygenates into the 50 States and the District of Columbia.

## Sampling

The sampling procedure used for the survey form EIA-819M is the cut-off method and was performed using software developed by the EIA's Office of Statistical Standards. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production, oxygenate stocks, oxygenate imports, and oxygenates used in the blending of motor gasoline) during 1992. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers approximately 90 percent of the total for each oxygenate item and supply type by geographic region (PAD Districts I through V) for which data may be published.

## Frames Maintenance

The Petroleum Supply Division (PSD) maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the frames survey.

The activities for frames maintenance are conducted within two time frames: monthly and annually. Monthly frames maintenance procedures for the EIA-819M focus on examining several frequently published industry periodicals that report changes in status (births, deaths,

sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

To supplement monthly frames maintenance activities and to provide more comprehensive coverage, the PSD conducts an annual frames investigation. This annual evaluation results in the reassessment and recompilation of the complete frame.

## Quality Control and Data Revision

### Quality Control

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made, when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

### Response Rate

The response rate is usually 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted by telephone or in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

### Resubmissions

Resubmissions are any changes to the originally submitted data that were either requested by the EIA or initiated by the respondent. Resubmissions are compared with the original submission and processed at the time of receipt. Entries on Tables B1-B3 of this appendix will be marked with an "R" to indicate that data have been revised.

## Data Imputation and Estimation

In any survey, nonresponse can be a major concern because the effects can cause serious bias in survey results. Nonresponse occurs whenever requested information is not obtained from all units in a survey. The EIA-819M has a very high response rate. Whenever survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the total error associated with nonresponse, it can serve to reduce the error. The data reported in the previous month are used as imputed values for missing data.

After the data files have been entered and corrected, aggregation is done for production, imports, and stocks, by each geographic region. Estimation factors, which were derived from 1992 reported data, are then applied to each cell to generate published estimates.

## Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the EIA to provide company-specific data to the Department of Justice, or to any other Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on this form will be kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. 552, the DOE regulations, 10 C.F.R. 1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. 1905.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in the determination, respondents should demonstrate to the DOE that for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed.

## EIA-819M Definitions

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group;  $\text{CH}_3-(\text{CH}_2)_n-\text{OH}$  (e.g., methanol, ethanol, and tertiary butyl alcohol (TBA)).

**Blending Plant.** A facility which has no refining capability but is either capable of producing finished

motor gasoline through mechanical blending or blends oxygenates into motor gasoline.

**Bulk Station.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of less than 50,000 barrels and receives its petroleum products by tank car or truck.

**Bulk Terminal.** A facility used primarily for the storage and/or marketing of petroleum products which has a total bulk storage capacity of 50,000 barrels or more and/or receives petroleum products by tanker, barge, or pipeline.

**Ending Stocks.** Stocks of oxygenates held in storage as of 12 midnight on the last day of the month.

**ETBE (ethyl tertiary butyl ether)  $(CH_3)_3COC_2H_5$ .** An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

**Ether.** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

**Fuel Ethanol  $(C_2H_5OH)$ .** An anhydrous denatured aliphatic alcohol intended for gasoline blending as described in Oxygenate definition.

**Methanol  $(CH_3OH)$ .** A light volatile alcohol intended for gasoline blending as described in Oxygenate definition.

**MTBE (methyl tertiary butyl ether)  $(CH_3)_3COCH_3$ .** An ether intended for gasoline blending as described in Oxygenate definition.

**Other Oxygenates.** Other aliphatic alcohols and aliphatic ethers intended for motor gasoline blending (e.g., isopropyl ether (IPE) or n-propanol).

**Oxygenates.** Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend.

Through a series of waivers and interpretive rules, the Environmental Protection Agency (EPA) has determined the allowable limits for oxygenates in unleaded gasoline. The "Substantially Similar" Interpretive Rules (56 FR (February 11, 1991)) allows blends of aliphatic alcohols other than methanol and aliphatic ethers, provided the oxygen content does not exceed 2.7 percent by weight.

The "Substantially Similar" Interpretive Rules also provide for blends of methanol up to 0.3 percent by

volume exclusive of other oxygenates, and butanol or alcohols of a higher molecular weight up to 2.75 percent by weight.

Individual waivers pertaining to the use of oxygenates in unleaded gasoline have been issued by the EPA. They include:

**Fuel Ethanol.** Blends of up to 10 percent by volume anhydrous ethanol (200 proof) (commonly referred to as the "gasohol waiver").

**Methanol.** Blends of methanol and gasoline-grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5 percent by weight and the ratio of methanol to GTBA is less than or equal to 1. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the "ARCO" waiver).

Blends of up to 5.0 percent by volume methanol with a minimum of 2.5 percent by volume co-solvent alcohols having a carbon number of 4 or less (i.e., ethanol, propanol, butanol, and/or GTBA). The total oxygen must not exceed 3.7 percent by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity specifications (commonly referred to as the "DuPont" waiver).

**MTBE (methyl tertiary butyl ether).** Blends up to 15.0 percent by volume MTBE which must meet the ASTM D4814 specifications. Blenders must take precautions that the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the "Sun" waiver).

**Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, alcohol and oxygenates.

**TAME (tertiary amyl methyl ether)  $(CH_3)_2(C_2H_5)COCH_3$ .** An oxygenate blend stock formed by the catalytic etherification of isoamylene with methanol.

**TBA (tertiary butyl alcohol)  $(CH_3)_3COH$ .** An alcohol primarily used as a chemical feedstock, a solvent or feedstock for isobutylene production for MTBE; produced as a co-product of propylene oxide production or by direct hydration of isobutylene.



# Glossary

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons.

**CIF (Cost, Insurance, Freight).** This term refers to a type of sale in which the buyer of the product agrees to pay a unit price that includes the f.o.b. value of the product at the point of origin plus all costs of insurance and transportation. This type of a transaction differs from a "Delivered" purchase, in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Lading and Quality Report) rather than pay based on the quantity and quality ascertained at the unloading port. It is similar to the terms of an f.o.b. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.

**Cooling Degree-Days.** The number of degrees per day the daily average temperature is above 65 degrees F. The daily average temperature is the mean of the maximum and minimum temperature for a 24-hour period.

**Crude Oil.** A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Lease condensate and drips are included but topped crude oil (residual) and other unfinished oils are excluded.

**Crude Oil Input.** The total crude oil put into processing units at refineries.

**Degree-Day Normals.** Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1951-1980). These may be simple degree-day normals or population-weighted degree-day normals.

**Distillate Fuel Oil.** Includes No. 1, No. 2, and No. 4 fuel oils, and No. 1, No. 2, and No. 4 diesel fuels. These are light fuel oils used primarily for home heating, as a diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation. Distillate fuel oil is reported in the following sulfur categories: 0.05% sulfur and under and greater than 0.05% sulfur.

**FOB (Free On Board).** Pertains to a transaction whereby the seller makes the product available within an agreed on period at a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance. Distillate fuel oil is reported in the following sulfur categories: 0.05% sulfur and under and greater than 0.05% sulfur.

**Gas Oil.** European designation for No. 2 heating oil, and diesel fuel.

**Gross Inputs.** The crude oil, unfinished oils, and natural gas plant liquids put into atmospheric crude oil distillation units.

**Heating Degree-Days.** The number of degrees per day the daily average temperature is below 65 degrees F. The daily average temperature is the mean of the maximum and minimum temperature for a 24-hour period.

**Imports.** Unless otherwise specified in this report, refers to gross imports. Imports of minor products ("other oils") include aviation gasoline, kerosene, unfinished oils, liquefied petroleum gases, plant condensate, petrochemical feedstocks, lube oils, waxes, special naphthas, coke, asphalt, and other miscellaneous oils.

**Jet Fuel.** Includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a product in the heavy naphthas range used primarily for military turbojet and turboprop aircraft engines.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane. Excludes still gas.

**Motor Gasoline (Finished).** Includes reformulated gasoline, oxygenated gasoline (EPA approved), and other finished gasoline in the gasoline range. Blendstock is excluded until blending has been completed. Production data represent reformulated, oxygenated, and other finished gasoline. Import data consists of the three types of finished motor gasoline and blending components. Total motor gasoline stocks consist of the three types of finished motor gasoline and blending components. Finished motor gasoline stocks are total motor gasoline stocks minus blending components. The stock change used in the calculation of motor gasoline product supplied is the change in finished motor gasoline stocks.

**Operable Capacity.** The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

**Petroleum Administration for Defense Districts (PADD).** Five geographical areas into which the nation was divided by the Petroleum Administration for Defense for purposes of administration. These PADDs include the States listed below:

## PADD I:

**Padd IX:** Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

**Padd IY:** Delaware, District of Columbia, Maryland, New Jersey, New York, and Pennsylvania.

**Padd IZ:** Florida, Georgia, North Carolina, South Carolina, Virginia, and West Virginia.

**PADD II:** Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, and Wisconsin.

**PADD III:** Alabama, Arkansas, Louisiana, Mississippi, New Mexico, and Texas.

**PADD IV:** Colorado, Idaho, Montana, Utah, and Wyoming.

**PADD V:** Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington.

**Population-Weighted Degree-Days.** Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute national population-weighted degree-days, the Nation is divided into nine Census regions comprised of from three to eight States which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and these products are then summed to arrive at the national population weighted degree-day figure.

**Processing Gain.** The volumetric amount by which total output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

**Products Supplied.** A value calculated for specific products which is equal to domestic production plus net imports (imports less exports), less the net increase in primary stocks. Total products supplied is calculated as inputs to refineries, plus estimated refinery gains, plus other hydrocarbon input, plus product imports, less product exports, less the net increase in product stocks. Values shown for "Other Oils" product supplied are the difference between total product supplied and product supplied values for specified products. Other oils product supplied incorporates crude oil product supplied and reclassified product adjustment.

**Refiner Acquisition Cost of Crude Oil.** The average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC 1131. Imported crude oil is any crude oil which is not domestic oil. The composite is the weighted average price of domestic and imported crude oil. Prices do not include the price of crude oil for the SPR.

**Refinery Capacity Utilization.** Ratio of the total amount of crude oil, unfinished oils, and natural gas plant liquids run through crude oil distillation units to the operable capacity of these units. In the period 1979-1984 the refinery capacity utilization for all U.S. refineries ranged between 87 percent and 65 percent. The ratio for an individual refinery may fluctuate much more depending on the type of crude and other raw materials processed, the types of products produced, and the operating conditions of the refinery.

**Residual Fuel Oil.** Includes No. 5 and No. 6 fuel oils which are heavy oils used primarily for electric power generation, for industrial and commercial space heating, as a ship fuel, and for various industrial uses.

**Retail Motor Gasoline Prices.** Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). These prices are collected in 85 urban areas selected to represent all urban consumers -- about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).

**Stock Change (Refined Products).** Component of Product Supplied calculation shown on U.S. Petroleum Balance. The product stock change shown on the U.S. Petroleum Balance Sheet for the current 4-week period is calculated in the following way; an average daily stock change is calculated for major refined products (i.e., all actual reported stocks); this stock change is added to an estimate for minor product stock change based on historical monthly data; a daily average stock change for refined product stocks for the 4-week period is then calculated. To calculate minor product stock change, the stock levels shown for other oils in the stock section of the balance sheet are used. These other oils stock levels are derived by: 1) computing an average daily rate of stock change for each month based on monthly data for the past 6 years; 2) using this daily rate and the minor stock levels from the most recent monthly publication to estimate the minor product stock level for the current period.

**Stocks.** For individual products in the WPSR, quantities held at refineries, in pipelines, and at bulk terminals which have a capacity of 50,000 barrels or more, and in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but included in "Other Oils" estimates and "Total."

**Unaccounted-for Crude Oil.** A term which appears in U.S. Petroleum Balance Sheet. It reconciles the difference between data (or estimates) about supply and data (or estimates) about disposition. Its value can be positive or negative since it is a balancing term. As it appears in the monthly publications, it reflects the accuracy of the reported data. Because the unaccounted-for crude oil figure reflects the accuracy of reported and estimated figures, one would expect the figure to be larger in balances using preliminary or estimated data and smaller in balances using final data. In fact, the published figures confirm this expectation. In the WPSR, 4-week averages for the previous year are interpolated from final monthly data, so that the unaccounted-for crude oil value for the previous year is considerably smaller than that for the current period.

**Unfinished Oils.** Includes all oils requiring further processing, except those requiring only mechanical blending.

**United States.** For the purpose of the report, the 50 States and the District of Columbia. Data for the Virgin Islands, Puerto Rico, and other U.S. territories are not included in the U.S. Totals.

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*Petroleum Supply Monthly*, updated on the 20th of the month

*Oxygenate data*, updated approximately 15 working days after the end of the report month

*Heating fuel data*, (April through September) updated the 2nd week of the month

*Petroleum Marketing Monthly*, updated on the 20th of the month

*Winter Fuels Report*, (October through March) updated on Wednesdays (Thursdays in the event of a holiday) at 5 p.m.

*Natural Gas Monthly*, updated on the 20th of the month

*Weekly Coal Production*, updated on Fridays at 5 p.m.

*Quarterly Coal Report*, updated 60 days after the end of the quarter

*Electric Power Monthly*, updated on the 1st of the month